Appendix E: Traffic Impact Analysis

TRANSPORTATION IMPACT ANALYSIS - DRAFT

MOUNTAIN WINERY

PROPOSED HOTEL

SARATOGA, CALIFORNIA

Prepared for:

Prepared by:

October 21, 2019
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TRANSPORTATION IMPACT ANALYSIS - DRAFT

FOR

MOUNTAIN. WINERY

PROPOSED HOTEL

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EXECUTIVE SUMMARY

This report presents the Transportation Impact Analysis (TIA) findings for a proposed 300 room destination hotel (the "Project") on the Mountain Winery property.

The Project is anticipated to construct a hotel that consists of up to 300 rooms. The hotel is anticipated to operate similar to a resort-style hotel and visitors are anticipated to use the hotel to attend events located at the Mountain Winery property.

New CEQA Guidelines per Senate Bill 743 (SB 743) will require projects to evaluate Vehicle Mile Traveled (VMT) for proposed projects starting from July 1, 2020. The County of Santa Clara has not adopted these new guidelines yet but required that the Project evaluate both level of service (LOS) and VMT. It is anticipated that the proposed 300 room hotel would increase VMT by 6,910 vehicle-miles. Based on this analysis, it is anticipated that the construction of this proposed hotel would be determined to result in a significant transportation impact under SB 743.

However, closer to the project site, traffic would be added to the local street network. Subsequently, a more detailed operational (LOS and other measures) and safety analysis was conducted at various streets and intersections as indicated in this study.

Impacts associated with the Project were evaluated for the weekday AM and PM peak one-hour periods, consistent with accepted County guidelines and criteria. Typically, peak periods extend over more than just the one hour analyzed, but this analysis presents the busiest one hour in a peak period. Though the peak-periods for the morning and afternoons are usually longer than one hour, the delay and LOS resulting from the peak-hour analysis would represent the worst conditions experienced during the peak-periods.

Peak road network traffic in the study area was observed between 7:00am-9:00am in the morning and between 4:00pm-6:00pm in the afternoon. The counts were conducted on a typical travel day in Saratoga when school is in session and is adequate for CEQA analysis. Busier times, like summer and holiday weekends do present higher traffic volumes, but most days throughout the year, and peak travel periods for the Project, is adequately represented in this analysis per County and CEQA guidelines. The TIA analysis was conducted for the following analysis scenarios:

- **Scenario 1: Existing (2019) Conditions**
- **Scenario 2: Existing (2019) Plus Project Conditions**
- **Scenario 3: Background Conditions**
- **Scenario 4: Background Plus Project Conditions**
- **Scenario 5: Cumulative (2040) Conditions**
- **Scenario 6: Cumulative (2040) Plus Project Conditions**
- **Project Vehicle Miles Traveled (VMT)**

Study Intersections

The study intersections identified below were selected based on the proposed trip generation and estimated trip distribution. The Project trip distribution was developed based on observed travel patterns, prior analyses performed for the Mountain Winery property, and knowledge of the study area.

#	Intersection
1	Saratoga-Sunnyvale Rd & Big Basin Way/Saratoga Ave
2	Saratoga-Sunnyvale Rd & Pierce Rd
3	Pierce Rd & Mt Eden Rd/Mt Eden Ct
4	Pierce Rd & Saratoga Heights Dr
5	Pierce Rd & Vintage Ln/Winery Access Rd
6	Pierce Rd & Route 9 (Congress Springs Rd)
7	Route 9 & Toll Gate Rd

Trip Generation Estimates

For this analysis, the Resort Hotel (LU 330) was used to represent the Project. It was assumed that the trip generation rates include internal capture, therefore no reductions were applied to the trip generation.

The traffic analysis is based on the Project generating a net of approximately 85 new AM peak hour, 101 new PM peak hour, and 1,431 daily trips.

Impacts and Mitigation Measures

Based on the analysis, the Project would not trigger any significant impacts.

As of the preparation of this analysis, the City of Saratoga has not yet defined its VMT guidance (SB 743 does not require this be completed until July 1, 2020). As such no threshold or basis for making a VMT based significant transportation impact determination under CEQA exists. Accordingly, the VMT information provided within this document is provided for informational purposes and as the basis for evaluating air quality in a separate analysis.

1. INTRODUCTION

This Transportation Impact Analysis (TIA) presents the findings of the traffic analysis conducted for the construction of a proposed destination hotel with up to 300 rooms on the Mountain Winery property in Santa Clara County, just west of Saratoga. The hotel is anticipated to operate similar to a destination/resort hotel and visitors are anticipated to use the hotel to attend events (i.e. concerts) located at the Mountain Winery property and also during non-event days for wine tasting and other activities in the local area.

Figure 1 shows the location of Mountain Winery Hotel. No site plan has been provided for the proposed hotel.

This study was prepared based on discussions with the City of Saratoga. This study complies with traffic impact study guidelines and criteria set forth by the Santa Clara Valley Transportation Authority, the City of Saratoga, and the California Department of Transportation (Caltrans).

Analysis Methodology

Development Conditions

This transportation impact analysis is based on the following development conditions:

Scenario 1: Existing (2019) Conditions

Based on current traffic counts taken in 2019 and existing roadway geometry and traffic control.

Scenario 2: Existing (2019) Plus Project Conditions

Based on adding traffic generated by the Project to the existing traffic volumes, existing roadway geometries, and traffic control.

Scenario 3: Background Conditions

Based on adding future year traffic forecasts estimated for developments anticipated to occur at the time the Project is constructed to Existing (2019) conditions. The future traffic forecasts were determined by adding and distributing traffic generated from pending/approved developments provided by the City of Saratoga.

Scenario 4: Background Plus Project Conditions

Based on adding traffic generated by the Project the Background Conditions.

Scenario 5: Cumulative (2040) Conditions

Based on traffic volumes forecasted for developments anticipated to occur by the year 2040. These forecasts were determined using the 2040 VTA travel demand forecasts.

Scenario 6: Cumulative (2040) Plus Project Conditions

Based on adding traffic generated by the Project to the Cumulative (2040) Conditions.

Project Vehicle Mile Traveled Analysis

Based on past ticket sale purchase location information by ZIP Code between 2017 and 2019 and the location of existing hotels in the general vicinity of the proposed Project.

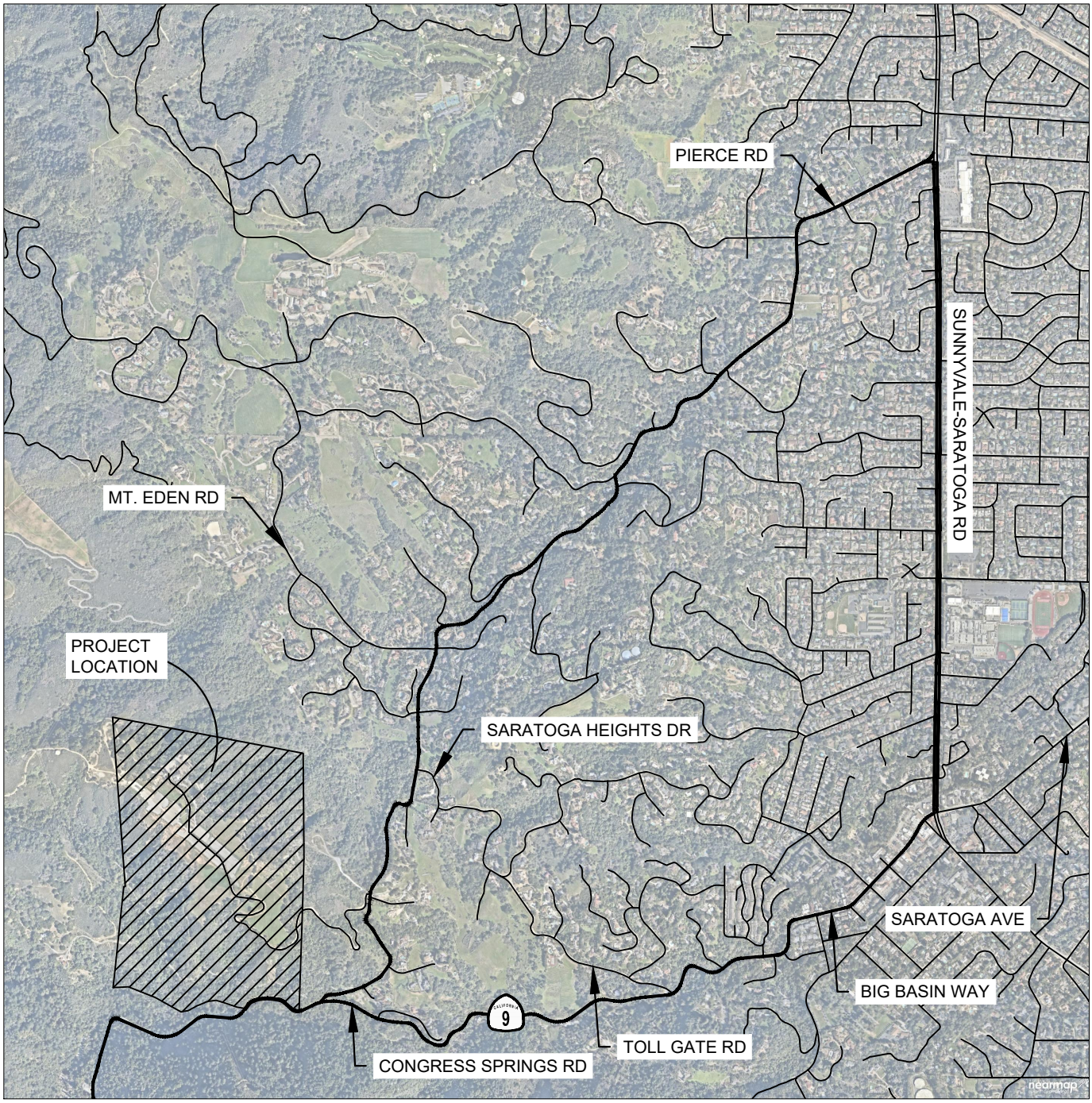

FIGURE 1
MT WINERY TIA
SITE LOCATION AND PROJECT VICINITY MAP

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Vehicle Miles Traveled Methodology and Criteria

With the passing of SB 743 in 2019, Vehicle Miles Traveled (VMT) has become the indicator of transportation impacts in lieu of level of service (LOS) analysis. Jurisdictions have until July 1, 2020 to adopt thresholds of significance and implement the requirements of SB 743. Although the City of Saratoga has not adopted thresholds of significance, VMT was incorporated into this analysis documenting the Project's potential effects on the City of Saratoga roadway network.

The proposed Project is most similar to the commercial land use in that they primarily serve pre-existing needs (i.e. they do not generate new trips so much as meet existing demand).

This VMT analysis indicates an increase in total VMT by approximately 6,910 miles. As of the preparation of this analysis, the City of Saratoga has not yet defined its VMT guidance (SB 743 does not require this be completed until July 1, 2020). As such no threshold or basis for making a VMT based significant transportation impact determination under CEQA exists. Accordingly, the VMT information provided within this document is provided for informational purposes and as the basis for evaluating air quality in a separate analysis.

Operating Conditions and Criteria for Intersections

The HCM includes procedures for analyzing side-street stop-controlled (SSSC), all-way stop-controlled (AWSC), and signalized intersections. The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement and major street left-turns. Conversely, the AWSC and signalized intersection procedures define LOS as a function of average control delay for the intersection as a whole. VTA has specific delay threshold values for each LOS that is more detailed than that of the HCM. Pluses and minuses are added to the HCM ranges to further designate the LOS for signalized intersections. **Table 1** relates the operational characteristics associated with each LOS category for signalized intersections. **Table 2** relates the operational characteristics associated with each LOS category for unsignalized intersections.

Project impacts are determined by comparing conditions without the proposed Project to conditions with the addition of the proposed Project. Significant impacts for intersections are created when traffic from the proposed Project causes the LOS to fall below the maintaining agency's LOS threshold or causes deficient intersections to deteriorate further.

Table 1 – Intersection Level of Service Definitions

Level of Service	Description	Signalized (Avg. control delay per vehicle sec/veh.)
A	Free flow with no delays. Users are virtually unaffected by others in the traffic stream	delay ≤ 10
B+ B B-	Stable traffic. Traffic flows smoothly with few delays.	10.0 < delay ≤ 12.0 12.0 < delay ≤ 18.0 18.0 < delay ≤ 20.0
C+ C C-	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.	20.0 < delay ≤ 23.0 23.0 < delay ≤ 32.0 32.0 < delay ≤ 35.0
D+ D D-	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.	35.0 < delay ≤ 39.0 39.0 < delay ≤ 51.0 51.0 < delay ≤ 55.0
E+ E E-	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.	55.0 < delay ≤ 60.0 60.0 < delay ≤ 75.0 75.0 < delay ≤ 80.0
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.	delay > 80
Sources: VTA Congestion Management Program, Traffic Level of Service Analysis Guidelines, June 2003		

Table 2 – Unsignalized Intersection Level of Service Definitions

Level of Service	Description	Signalized (Avg. control delay per vehicle sec/veh.)
A	Free flow with no delays. Users are virtually unaffected by others in the traffic stream	delay ≤ 10
B	Stable traffic. Traffic flows smoothly with few delays.	> 10 - 15
C	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.	> 15 - 25
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.	> 25 - 35
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.	> 35 - 50
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.	delay > 50
Sources: Transportation Research Board, *Highway Capacity Manual 2000*, National Research Council, 2000		

City of Saratoga

As defined on Page 10 of the City of Saratoga Circulation and Scenic Highway Element, the City of Saratoga has established LOS D as the minimum acceptable LOS for overall intersection operations during weekday AM and PM peak hours.

Caltrans

The following unsignalized intersections are operated by Caltrans:

- Pierce Road & Route 9 (Congress Springs)
- Toll Gate Road & Route 9
- Sunnyvale-Saratoga & Route 9 (Big Basin Way)/Saratoga Avenue

Caltrans has identified a level of service objective of C/D (i.e., on the "cusp" between levels of service C and D) as the acceptable service level for signalized intersections. Intersection impacts are defined to occur when the addition of Project traffic

1. Causes operations to deteriorate from an acceptable level (LOS C) to an unacceptable level (LOS D or worse).
2. Causes the existing measure of effectiveness (average delay) to deteriorate at a State operated intersection operating at worse than LOS C.

Under some circumstances, Caltrans will work with local agencies to determine an acceptable LOS standard on a case-by-base basis when the study roadway facility is constrained, and the LOS C objective is infeasible.

Santa Clara Valley Transportation Authority (VTA)

The following signalized intersection is identified in the 2015 VTA Congestion Management Plan (CMP):

- Sunnyvale-Saratoga & Route 9 (Big Basin Way)/Saratoga Avenue

This intersection operated by Caltrans; however, the VTA CMP guidelines are used to determine intersection LOS standards.

The VTA Congestion Management Plan (2017) states that LOS E is the minimum LOS except for intersections grandfathered in at LOS F. This intersection was not grandfathered in at LOS F; therefore, the LOS standard is LOS E.

Study Intersections

The proposed Project would generate new vehicular trips that would increase traffic volumes on the nearby street network. To assess changes in traffic conditions, the intersections listed in

Table 3 were selected for evaluation in consultation with City of Saratoga staff:

Table 3 – Study Intersections

#	Intersection	Jurisdiction
1	Saratoga-Sunnyvale Rd & Route 9 (Big Basin Way)/Saratoga Ave	Caltrans/VTA
2	Saratoga-Sunnyvale Rd & Pierce Rd	City of Saratoga
3	Pierce Rd & Mt Eden Rd/Eden Ct	City of Saratoga
4	Pierce Rd & Saratoga Heights Dr	City of Saratoga
5	Pierce Rd & Vintage Ln/Winery Access Rd	City of Saratoga
6	Pierce Rd & Route 9 (Congress Springs Rd)	Caltrans
7	Toll Gate Rd & Route 9	Caltrans

These study intersections are illustrated in **Figure 2**.

Report Organization

This transportation impact analysis includes the following chapters:

Chapter 2 describes the existing pedestrian, bike, transit, and motorist transportation system in the Project vicinity, as well as current operating conditions at study intersections.

Chapter 3 discusses the proposed Project's trip generation characteristics as well as methodologies and assumptions used to estimate trip credits and net Project traffic added to study intersections. Transportation improvements proposed by the Project are also presented.

Chapter 4 describes Existing Plus Project Conditions and analysis.

Chapter 5 discusses Background Conditions with and without the Project.

Chapter 6 discusses Cumulative Conditions with and without the Project.

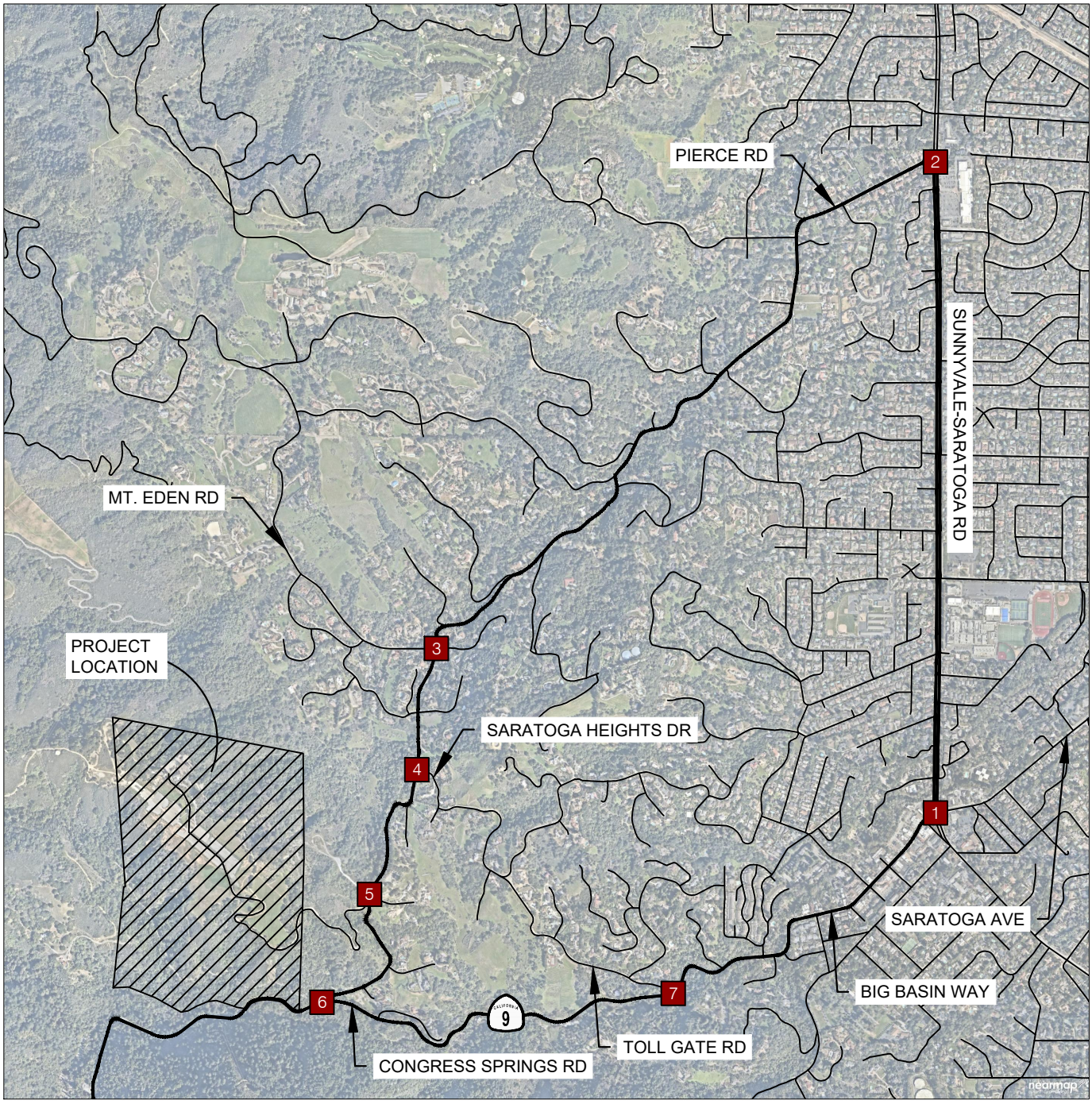
Chapter 7 describes the Project's on-site parking and transportation demand management.

Chapter 8 presents the Project's potential effects on pedestrian, bicycle, and transit mobility.

Chapter 9 discusses the methodology, assumptions, analysis, and findings of the Project specific vehicle miles traveled evaluation.

Chapter 10 summarizes the Project's transportation Fees as well as potentially significant impacts and proposed mitigation measures.

A technical appendix is also attached containing traffic count data, and intersection level of service analysis output sheets.



LEGEND

X INTERSECTION #

N

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FIGURE 2
MT WINERY TIA
SITE LOCATION AND PROJECT VICINITY MAP

August 19

2. EXISTING (2019) CONDITIONS

Existing Roadway Network

Below is a description of the principal roadways within the study area:

Saratoga-Sunnyvale Road is a north-south oriented, four-lane divided arterial that connects I-280 in Cupertino and Big Basin Way (Route 9) in Saratoga. The posted speed limit is 40 miles per hour and signals are located at the intersections of Saratoga-Sunnyvale Road at Prospect Road, Pierce Road, Cox Avenue, and Big Basin Way. On street parking is not allowed on either side of this road.

Pierce Road is an east-west, two-lane collector extending between Saratoga-Sunnyvale Road and Congress Springs Road (Route 9). This road provides direct access to the site at the intersection of Vintage Lane. The speed limit varies along Pierce Road from 30 miles per hour near Saratoga-Sunnyvale Road to 14 miles per hour around curves. The speed limit near the project site is 25 miles per hour. On street parking is not allowed on either side of the road.

Congress Springs Road (Route 9) is an east-west, two-lane minor arterial that extends from Skyline Boulevard (Route 35) to Toll Gate Road. The posted speed limit is 30 miles per hour; however, the speed limit varies depending on the geometry of the roadway. On street parking is not allowed on either side of the road.

Big Basin Way (Route 9) is an east-west, two-lane minor arterial that extends from Toll Gate Road to Saratoga-Sunnyvale Road. The posted speed limit is 25 miles per hour; however, the speed limit varies depending on the geometry of the roadway. On street parking is allowed in the Saratoga Village.

Saratoga Avenue is a northeast-southwest minor arterial that provides access from SR-85 to Big Basin Way and the Saratoga Village. The posted speed limit is 35 miles per hour. There are signalized intersections on Saratoga Avenue (between SR-85 and the Saratoga Village) at Fruitvale Avenue, Kerwin Ranch Court, and Saratoga-Sunnyvale Road. On street parking is allowed in some sections on both sides of the road.

Mt Eden Road is a northwest-southeast, two-lane collector that provides access from Pierce Road to Stevens Canyon Road. The posted speed limit is 25 miles per hour and on street parking is not allowed on either side of the road.

Toll Gate Road is a northwest-southeast, two-lane rural road which provides access from Route 9 to Saratoga Heights Drive and Canyon View Drive. The posted speed limit is 25 miles per hour and on street parking is not allowed on either side of the road.

Existing Driveway Access

There are currently two access locations for the Mountain Winery

- Mountain Winery Driveway – This driveway is located at the western leg of the Pierce Road intersection with Vintage Lane/Mountain Winery Driveway. This driveway is the primary entrance to and exit from the Mountain Winery and provides access to the parking lot.

- Emergency Vehicle Access (EVA) Road – This gravel and partially-paved road is located just north of Highway 9 and is an emergency vehicle access (EVA) road that leads to the west side of Mountain Winery. The EVA road is used for secondary fire access to the Project site and for emergency evacuations. This EVA road is maintained by the landowner and is inspected annually for adequacy by the Santa Clara County Fire Department.

Existing Peak-Hour Turning Movement Volumes

Weekday intersection turning movement volumes for the existing study intersections were collected on June 6, 2019.

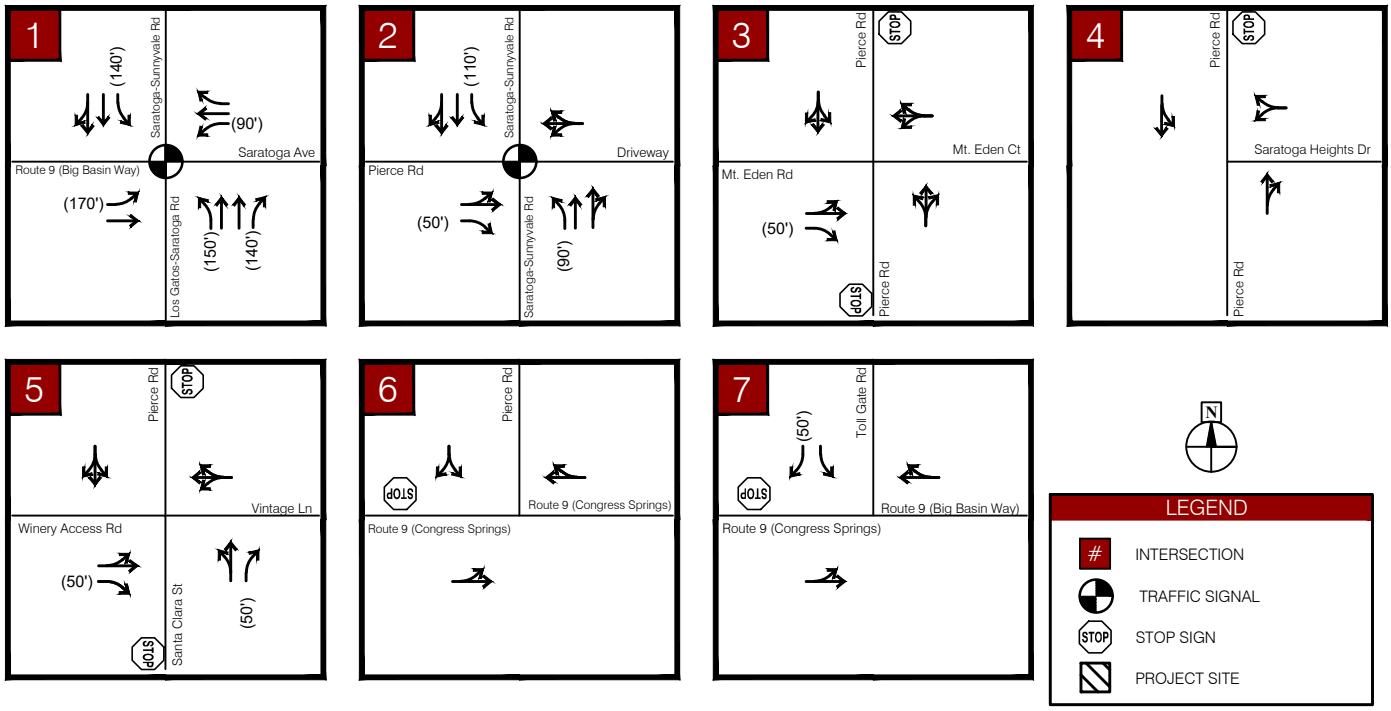
These counts included vehicles, bicycles, and pedestrians. Volumes for intersections were collected during the AM and PM peak periods of 7:00-9:00 AM and 4:00-6:00 PM, respectively. All traffic counts were collected when local schools were in session and the weather was fair.

Peak-hour volumes at each intersection's respective peak were conservatively used in this analysis, therefore, some volume imbalances were observed between the study intersections. Existing lane geometry and traffic control are illustrated in **Figure 3** while peak hour turning movement volumes are shown in **Figure 4.**

Field observations were conducted on the count data collection days to observe queues and existing conditions. Data and field visits indicate that peak traffic flow occurs for extended periods of time (typically from 7:00-9:00 AM and 4:00-7:00 PM). The highest one-hour morning (AM) and one-hour afternoon/evening (PM) peaks were selected for analysis, consistent with County, City, and State guidelines.

It was observed that for Intersection 1, some vehicles were observed performing the eastbound right turn movement. The intersection is striped as a through lane only; however, there is no signage to prevent right turn movements. To be conservative, the existing eastbound right turn movements were included in this analysis.

U-turns are analyzed (and illustrated in all figures) as left-turns since HCM methodologies do not support analysis of U-turns. Intersection volume data sheets for all traffic, pedestrian, and bicycle counts are provided in the **Appendix**.



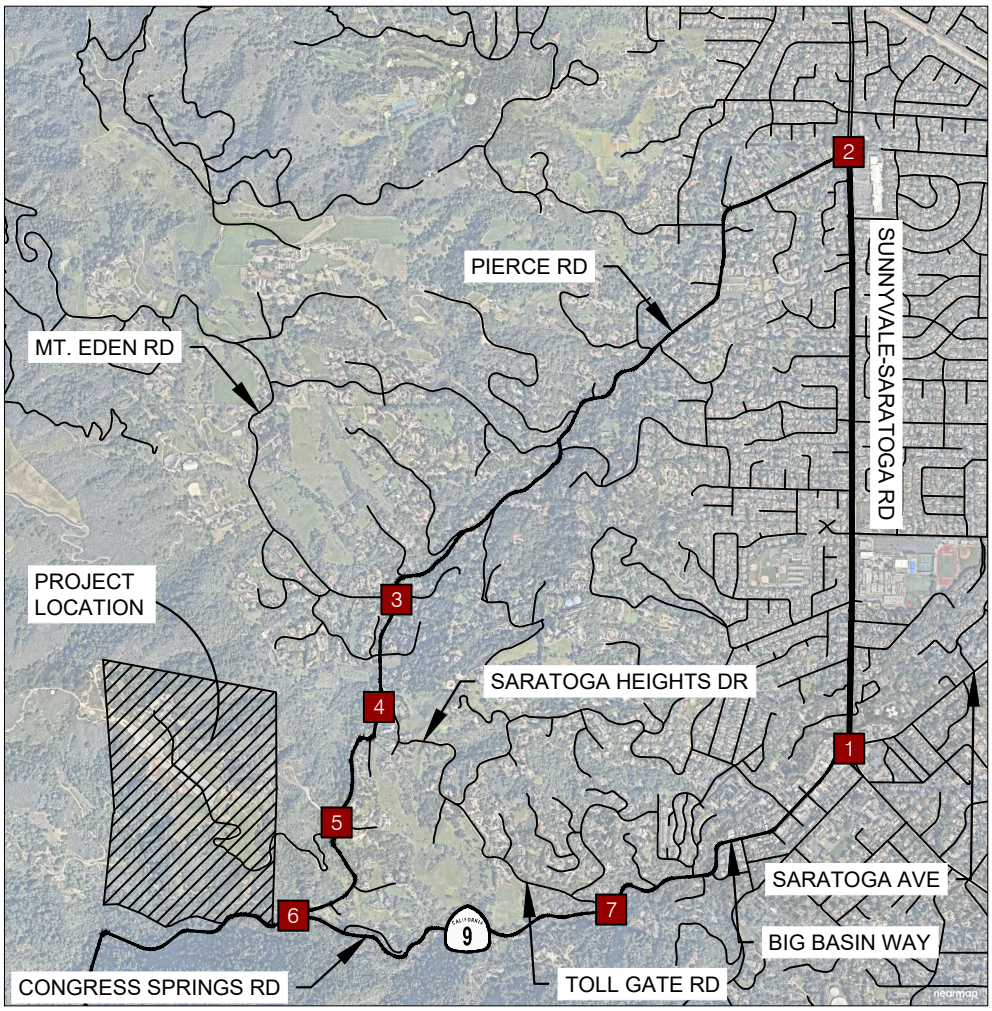


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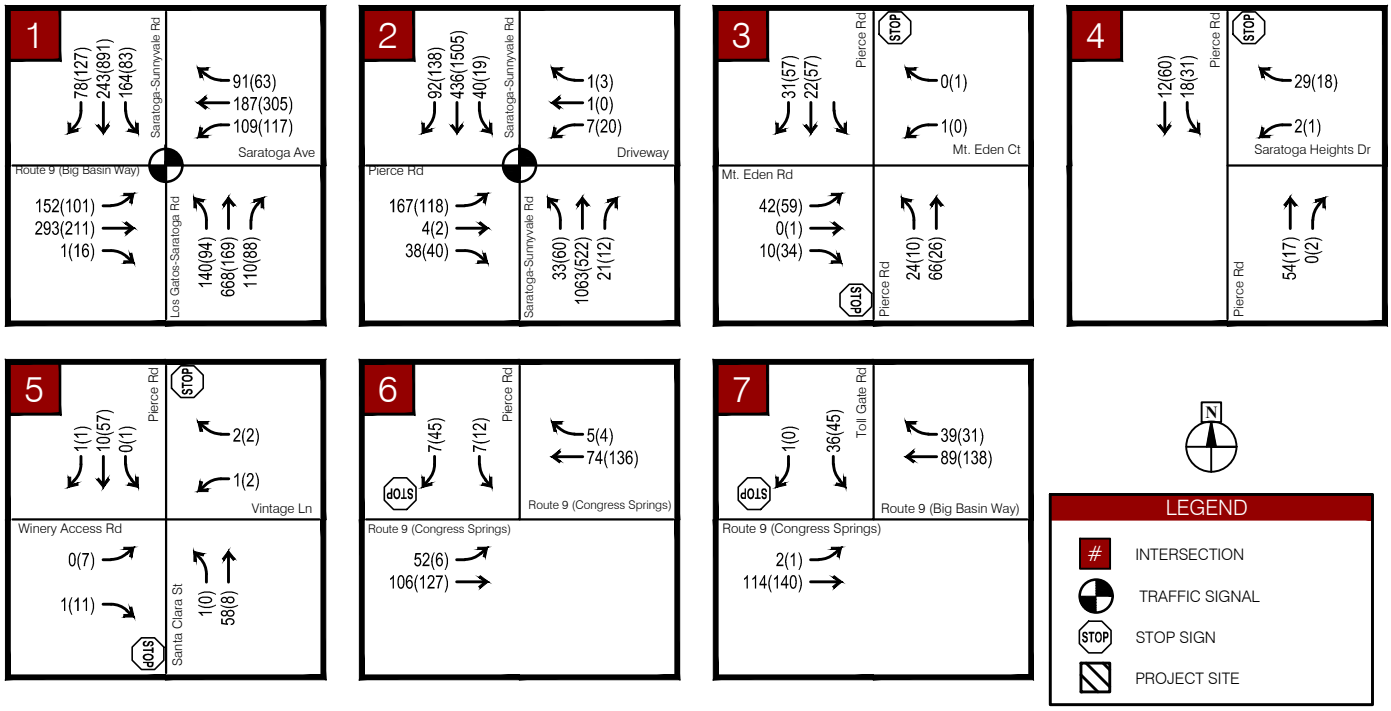
FIGURE 3
EXISTING (2018) CONDITIONS
LANE GEOMETRY AND TRAFFIC CONTROL



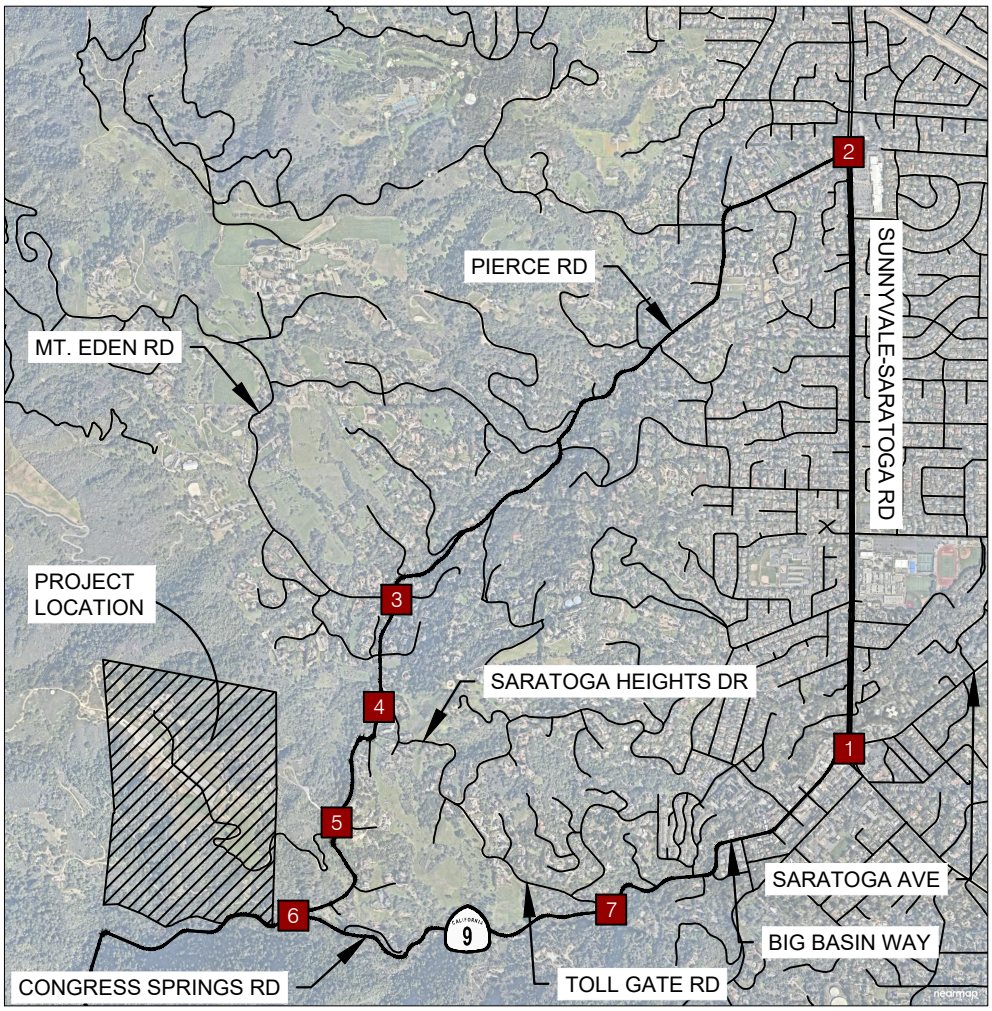


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FIGURE 4
EXISTING (2018) CONDITIONS
PEAK HOUR TURNING MOVEMENT VOLUMES

Existing Transit Facilities

The Santa Clara Valley Transportation Authority (VTA) provides transit services throughout Santa Clara County. The proposed hotel site is not located in the general service area for VTA and the nearest bus stop is located on Saratoga Avenue approximately 3.5 miles from the Project site. No sidewalk exists between the existing VTA bus stops and the Project site and visitors or employees are not expected to take the bus to access the project site.

Existing Pedestrian and Bicycle Facilities

Pedestrians

No sidewalks currently exist along the Project driveway, Pierce Road, or Route 9. The terrain is very steep along each roadway with an existing slope of approximately 9.5% along the Project driveway.

The closest sidewalks exist in downtown Saratoga along both sides of Route 9 (Big Basin Way) approximately 2.6 miles from the Project site. Sidewalks also exist on both sides of Saratoga-Sunnyvale Road, Saratoga Avenue, and Los Gatos-Saratoga Road. Existing count data shows no pedestrians at the Project driveway.

Bicycles

Bike facilities for the existing road network are discussed below. It should be noted that no Class I, II, or III bikeway facilities exist within a half-mile of the proposed Project and bicyclists are not expected to travel to the Project. Bicycle classification is based on Figure 5 of the Circulation and Scenic Highway Element of the General Plan (November 17, 2010).

Class I facilities are paved bicycle paths that are physically separated from the vehicular travel lane. No Class I facilities exist near the Project site.

Class II facilities, which are striped bike lanes along the street, exist in both directions along Saratoga-Sunnyvale Road, Los Gatos-Saratoga Road, and Saratoga Avenue.

Class III bicycle facilities are bike routes denoted by signs that are shared with vehicles along the roadway. Class III bicycle facilities currently exist along Route 9 (Big Basin Way) and Los Gatos-Saratoga Road. During field observations, it was also noted that bicyclists share the road with vehicles on Pierce Road and Highway 9.

The traffic count data provided shows some bicycle operations along Pierce Road; however, these bicyclists do not access the Mountain Winery site from Pierce Road. Since the terrain is steep (approximately 9.5% grade) along the existing Project driveway, it is not anticipated that bicyclists would use the Project driveway.

Existing Level of Service at Study Intersections

Traffic operations were evaluated at the study intersections based Existing Conditions lane geometry, traffic control, and peak hour traffic volumes.

All study intersections currently operate at an acceptable LOS during existing conditions.

Results of the analysis are presented in **Table 4** and TRAFFIX output sheets are provided in the **Appendix**.

Table 4 – Existing Conditions Intersection Level of Service

#	Intersection	Maintaining Agency	Control Type[3]	LOS Criteria	Existing Conditions					
					AM Peak Hour			PM Peak Hour		
					MVMT	Delay	LOS	MVMT	Delay	LOS
1	Sunnyvale-Saratoga Ave & Big Basin Way/Saratoga Ave	Caltrans/VTA	Signal	E	-	38.2	D+	-	33.3	C-
2	Sunnyvale-Saratoga Ave & Pierce Rd	Saratoga	Signal	D	-	13.7	B	-	13.0	B
3	Pierce Rd & Mt Eden Rd/Mt Eden Ct	Saratoga	SSSC	D	-	4.3	A	-	3.7	A
	Worst Approach				WB	9.8	A	EB	9.6	A
4	Pierce Rd & Saratoga Heights Dr	Saratoga	SSSC	D	-	4.0	A	-	2.9	A
	Worst Approach				WB	8.8	A	WB	8.6	A
5	Pierce Rd & Winery Access/Vintage Ln	Saratoga	SSSC	D	-	1.4	A	-	3.2	A
	Worst Approach				WB	8.8	A	EB	8.9	A
6	Pierce Rd & Route 9 (Congress Springs)	Caltrans	SSSC	C/D	-	2.3	B	-	2.4	A
	Worst Approach				SB	10.1	B	SB	9.7	A
7	Route 9 (Congress Springs) & Toll Gate Rd	Caltrans	SSSC	C/D	-	1.8	B	-	1.5	B
	Worst Approach				SB	10.5	B	SB	10.9	B

Notes:
1. Analysis performed using HCM 2000 Edition methodologies with TRAFFIX Software
2. Delay indicated in seconds/vehicle.
3. Signal = Signal Control; AWSC = All-Way Stop Control; SSSC = Side-Street Stop Control
4. City of Saratoga LOS standard is D, VTA CMP LOS standard is E, Caltrans LOS standard is C/D
*5. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.***

3. PROPOSED PROJECT

The Project site is located on a secluded mountain approximately 2.8 miles from Saratoga Village, and the Project proposes to construct a new destination/resort hotel with up to 300 rooms on the Mountain Winery property. The winery would not demolish any existing buildings on the existing site for the proposed hotel.

The hotel would primarily cater to tourists and the vacation industry and would provide recreational facilities/programs including wine tastings, concerts, hiking, and wedding events. It is anticipated that visitors that come to the hotel will stay on the Mountain Winery property; however, there may be a few visitors who use the hotel to visit other locations in the area.

The Project's primary access driveway is located along Pierce Road and the Project would not construct any new driveways. In addition, the main Project driveway would remain side street stop controlled with no bicycle or pedestrian access available to the site.

Currently, Mountain Winery site has a total of 933 parking spaces (including 908 standard spaces, 20 Americans with Disabilities Act (ADA) spaces, and 5 commercial/bus spaces). For the Project, parking may be expanded as needed within the Precise Plan area.

Trip Generation Estimates

Trip generation was developed for this Project using the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition (2017)*. A trip is defined in *Trip Generation* as a single or one-directional vehicle movement with either the origin or destination at the Project site. In other words, a trip can be either "to" or "from" the site. In addition, a single customer visit to a site is counted as two trips (i.e., one to and one from the site). For this Project, the destination/resort hotel will be analyzed using the Resort Hotel (Land Use 330) Land Use.

For purposes of determining the worst-case impacts of traffic on the surrounding street network, Project trips are typically estimated between the hours of 7:00-9:00 AM and 4:00-6:00 PM on a weekday.

It should also be noted that for this study, special events were not analyzed because previous studies have already completed this analysis in their TIA dated May 4, 1999. It is anticipated that all events that currently happen on the site would not change with the proposed destination/resort hotel. Therefore, the analysis completed by these previous studies are still applicable to the Mountain Winery site.

Internal capture reductions are typically considered for developments with complementary land uses to account for trips made within the development. On the Mountain Winery property, hotel visitors may go wine tasting, attend a concert, attend a wedding, or attend a corporate event. It was assumed that the Resort Hotel land use already accounts for internal trip reduction, therefore no additional reductions were applied. Pass-by trip reductions are typically considered to account for trips that are already on the roadway network directly adjacent to the proposed development

and will likely stop as they pass by the site. No pass-by trip reductions were taken for this development.

Project Trip Generation

For the Project, ITE Land Use Code 330 (Resort Hotel) was used. This ITE land use surveyed sites that are similar to a general hotel; however, a resort hotel provides a wide variety of recreational facilities/programs which most closely matches the Project description. The proposed destination hotel is expected to generate a net of 1,431 daily trips, 85 trips (61 in / 24 out) during the AM peak hour and 101 trips (43 in / 58 out) during the PM peak hour.

Table 5 provides the trip generation estimates for this project.

VTA TIA Requirements

In the VTA TIA Guidelines (October 2014) state that a TIA is required for a project that produces more than 100 peak hour trips. Since the destination hotel produces 101 PM peak hour trips, a TIA is required.

Table 5 – Project Trip Generation

Trip Generation Rates	ITE Land Use Code/Reference	Project Size		Daily Trips	Weekday AM Total Peak Hour	Weekday AM IN	/	Weekday AM OUT	Weekday PM Total Peak Hour	Weekday PM IN	/	Weekday PM OUT
Resort Hotel	330	-	Rooms	4.77	0.28	72%	/	28%	0.34	43%	/	57%
Project Conditions												
Resort Hotel	330	300	Rooms	1,431	85	61	/	24	101	43	/	58
		Net New Project Trips		**1,431**	**85**	**61**	**/**	**24**	**101**	**43**	**/**	**58**

Note:

1. Trip generation rates published by Institute of Transportation Engineers (ITE), "Trip Generation," 10th Edition, 2017.
2. ITE Resort Hotel (LU 330) Equations:
   AM: 0.38(x) - 28.58
   PM: 0.52(x) - 55.42
   Daily: No data provided. AM and PM peak hour trips for a Hotel (LU 310) is approximately 13% of the daily trips. Assumed the same rate for Resort Hotel (LU 330)

Trip Distribution and Assignment

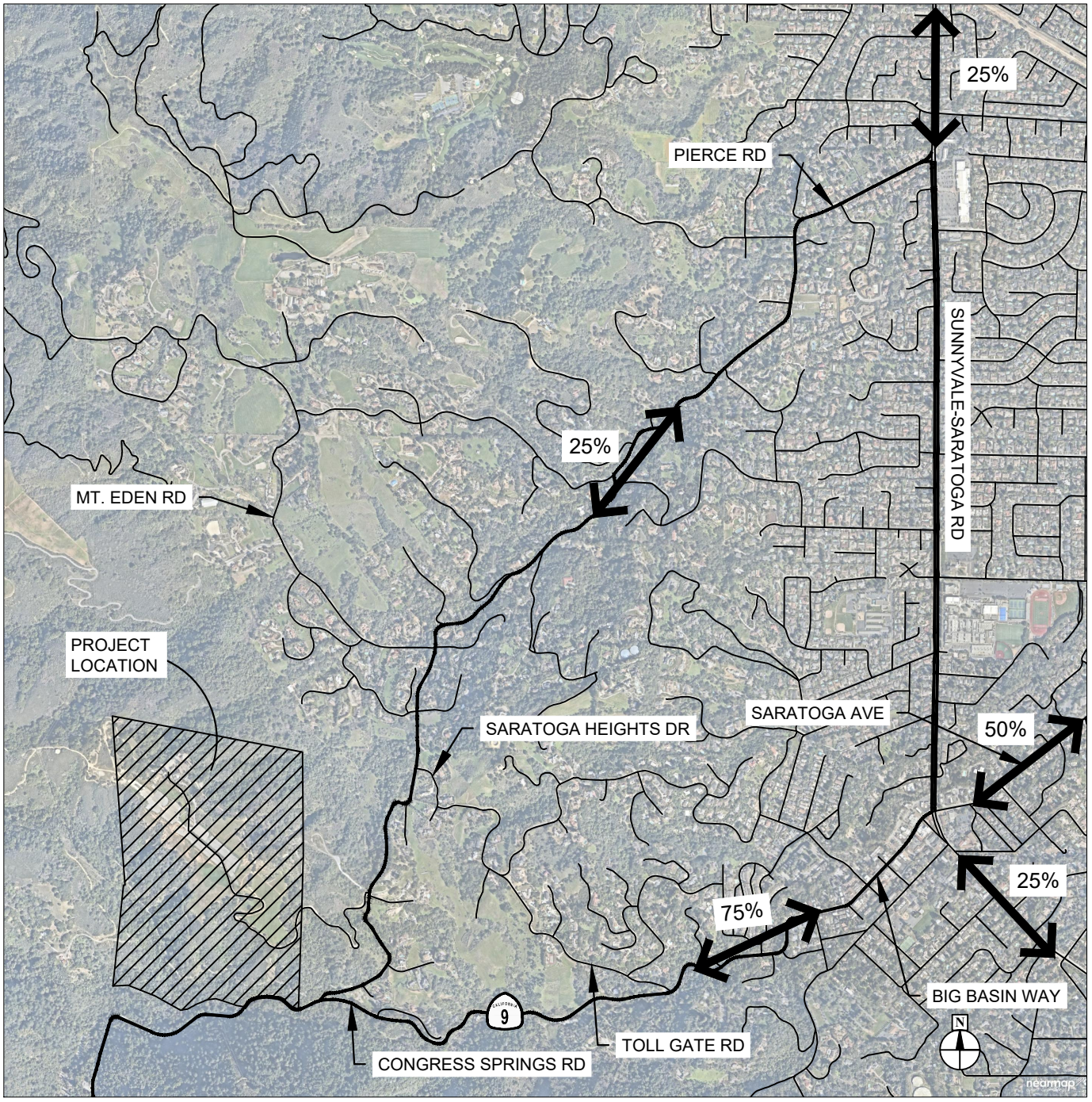
The trip distribution was developed based on previous studies at the Mountain Winery and knowledge of the study area.

Project trips are expected to utilize regional roadways, major arterials, and local collector roads to access the Project site. Trip distributions were estimated based on existing traffic patterns, the previously completed TIA, and knowledge of the study area.

Figure 5 graphically illustrates the assumed distribution in relation to the Project site and study intersections.

Figure 6 shows the net Project trip assignment for AM and PM peak hour periods that would occur at study intersections during Existing Plus Project and Background Plus Project Conditions.

All Project trips performing a right turn at Intersection 1 are expected to use the bypass just west of the intersection.



LEGEND

- # INTERSECTION
- PROJECT SITE
- XX% PROJECT DISTRIBUTION

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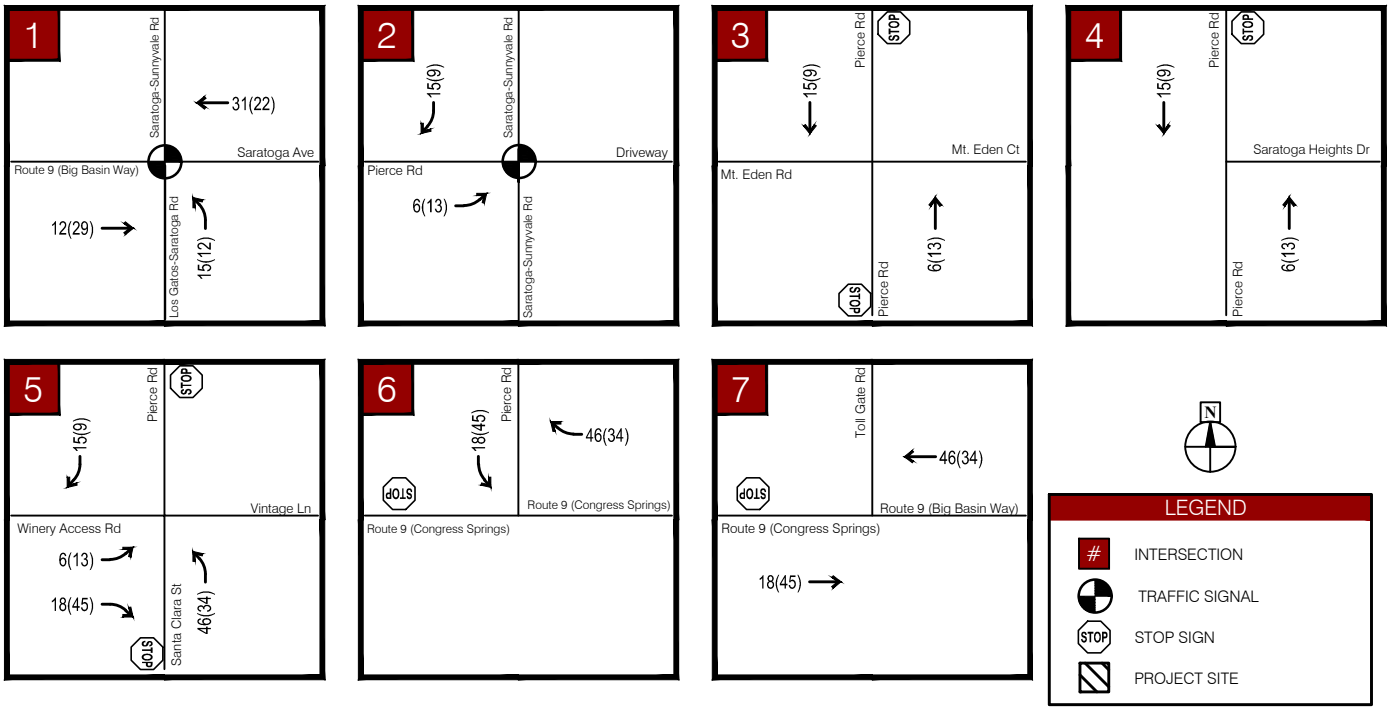
FIGURE 5
PROPOSED PROJECT
PROJECT TRIP DISTRIBUTION



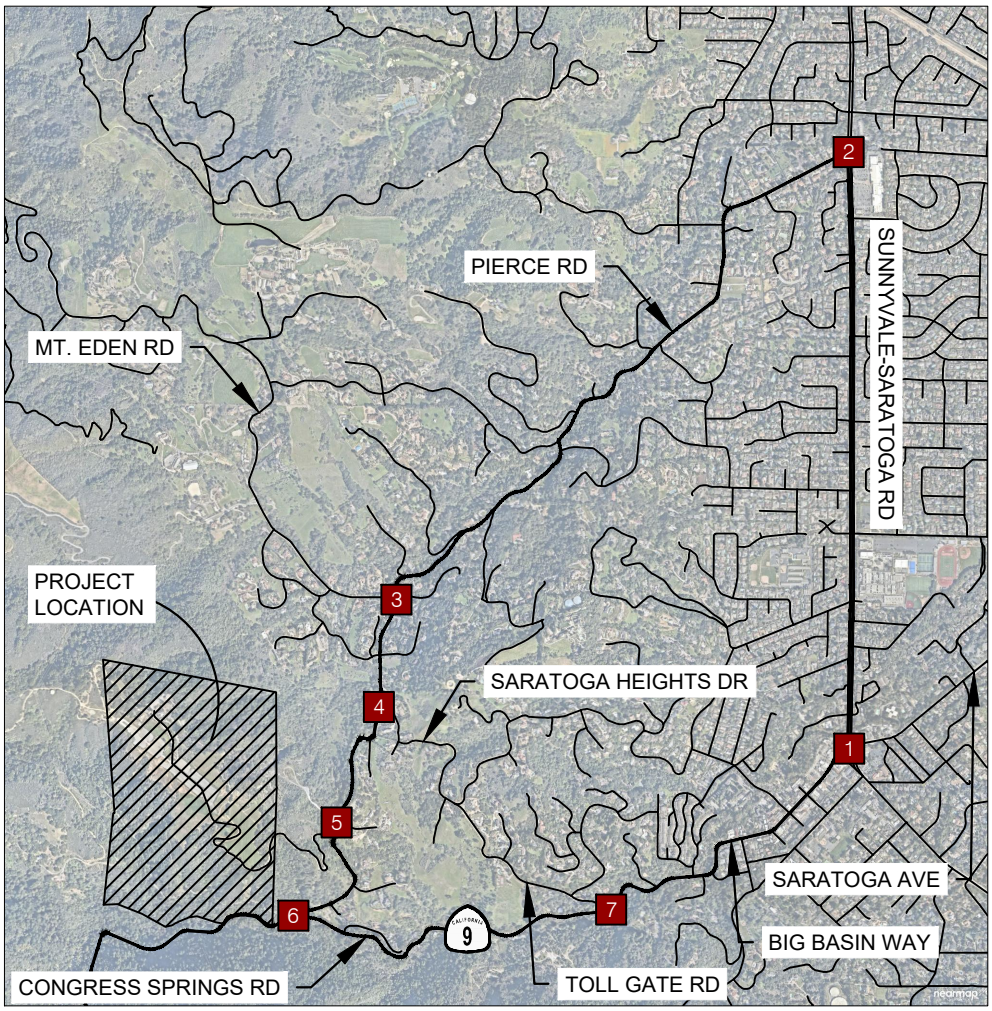


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FIGURE 6
PROJECT ASSIGNMENT
PEAK HOUR TURNING MOVEMENT VOLUMES

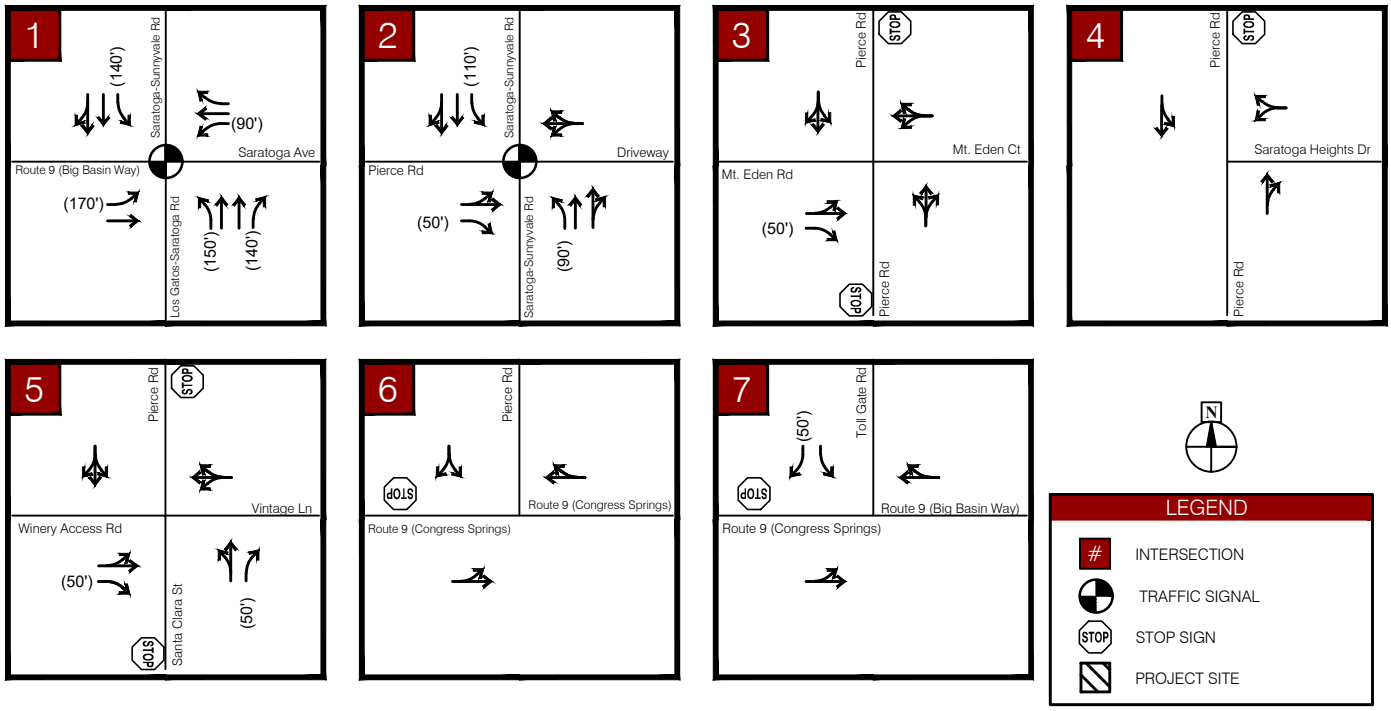
4. EXISTING (2019) PLUS PROJECT CONDITIONS

Traffic operations were evaluated at the study intersections under Existing plus Project conditions. **Figure 7** shows the Existing Plus Project lane geometry and traffic control and **Figure 8** shows the Existing Plus Project peak hour traffic volumes.

No study intersections would degrade from acceptable LOS without the Project, to unacceptable LOS with the addition of the proposed Project under Existing plus Project conditions.

Existing Plus Project analysis results are presented in **Table 6**. TRAFFIX output sheets are provided in the **Appendix**.

It should be noted that for some intersections, the reported delay improved with the addition of the project trips. The reason for this occurrence is because the trips were predominately added to the through lane movements, which had a lower movement delay than the average intersection delay, and thereby decreases the overall average delay.



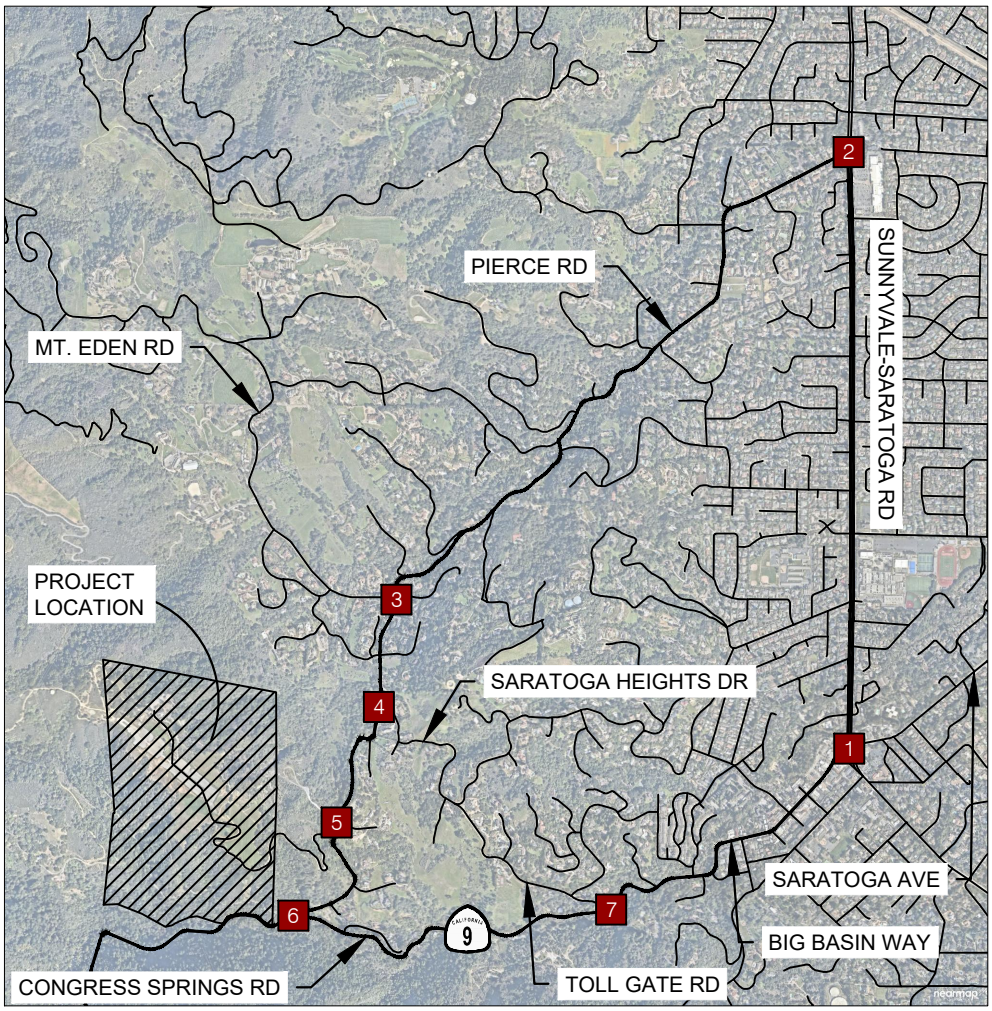


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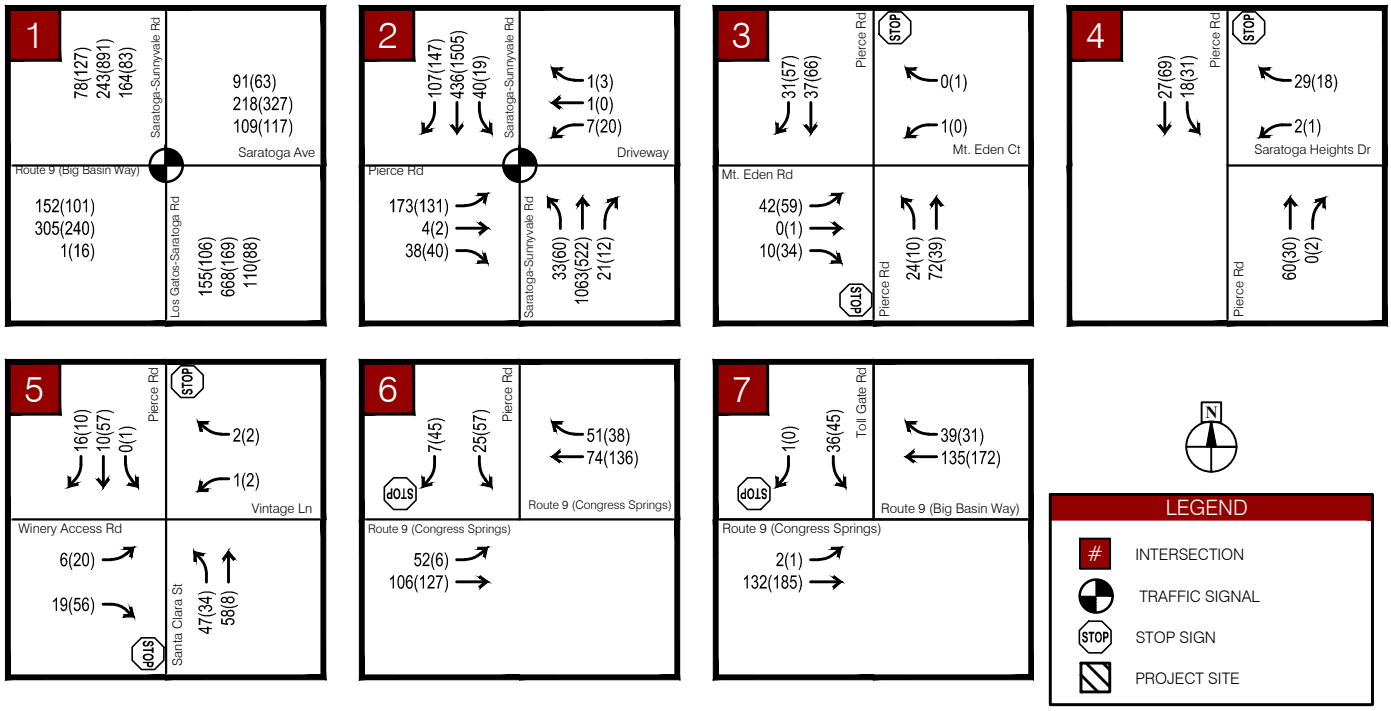
FIGURE 7
EXISTING PLUS PROJECT CONDITIONS
LANE GEOMETRY AND TRAFFIC CONTROL



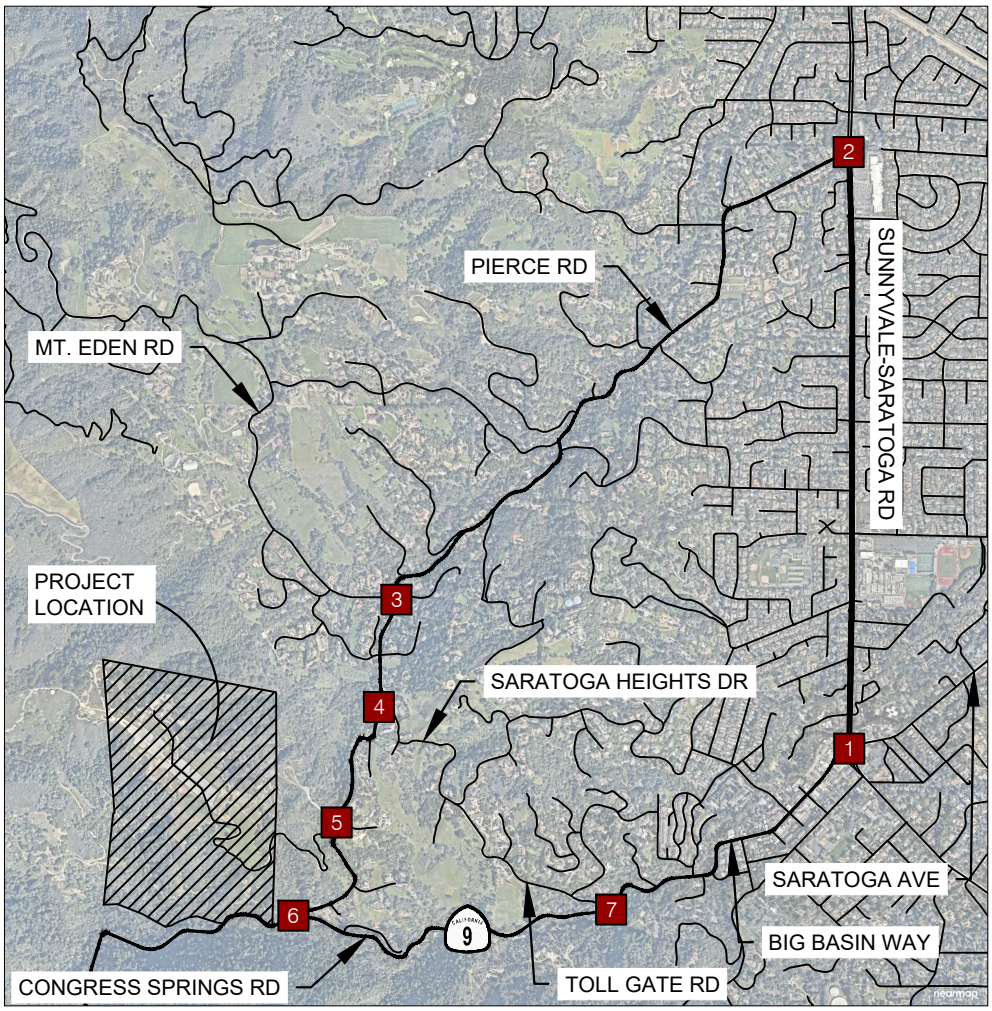


FIGURE 8
EXISTING PLUS PROJECT CONDITIONS
PEAK HOUR TURNING MOVEMENT VOLUMES

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Table 6 – Existing Plus Project Conditions Intersection Level of Service

#	Intersection	Maintaining Agency	Control Type	Existing Conditions						Existing + Project Conditions					
				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS
1	Sunnyvale-Saratoga Ave & Big Basin Way/Saratoga Ave	Caltrans/VTA	Signal	-	38.2	D+	-	33.3	C-	-	38.6	D+	-	34.5	C-
2	Sunnyvale-Saratoga Ave & Pierce Rd	Saratoga	Signal	-	13.7	B	-	13.0	B	-	13.9	B	-	13.8	B
3	Pierce Rd & Mt Eden Rd/Mt Eden Ct	Saratoga	SSSC	-	4.3	A	-	3.7	A	-	4.0	B	-	3.4	A
	Worst Approach			WB	9.8	A	EB	9.6	A	*EB*	*10.0*	*B*	*EB*	*9.8*	*A*
4	Pierce Rd & Saratoga Heights Dr	Saratoga	SSSC	-	4.0	A	-	2.9	A	-	3.4	A	-	2.4	A
	Worst Approach			WB	8.8	A	WB	8.6	A	*WB*	*8.9*	*A*	*WB*	*8.7*	*A*
5	Pierce Rd & Winery Access/Vintage Ln	Saratoga	SSSC	-	1.4	A	-	3.2	A	-	5.0	A	-	6.1	A
	Worst Approach			WB	8.8	A	EB	8.9	A	*WB*	*9.3*	*A*	*WB*	*9.6*	*A*
6	Pierce Rd & Route 9 (Congress Springs)	Caltrans	SSSC	-	2.3	B	-	2.4	A	-	2.7	B	-	3.6	B
	Worst Approach			SB	10.1	B	SB	9.7	A	*SB*	*11.3*	*B*	*SB*	*11.0*	*B*
7	Route 9 (Congress Springs) & Toll Gate Rd	Caltrans	SSSC	-	1.8	B	-	1.5	B	-	1.6	B	-	1.4	B
	Worst Approach			SB	10.5	B	SB	10.9	B	*SB*	*11.2*	*B*	*SB*	*11.7*	*B*

Notes:
1. Analysis performed using HCM 2000 Edition methodologies with TRAFFIX Software
2. Delay indicated in seconds/vehicle.
3. Signal = Signal Control; AWSC = All-Way Stop Control; SSSC = Side-Street Stop Control
4. City of Saratoga LOS standard is D, VTA CMP LOS standard is E, Caltrans LOS standard is C/D
5. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in ***bold.***

5. BACKGROUND CONDITIONS

Background Conditions were determined in consultation with City of Saratoga staff and evaluates traffic volumes, transportation network improvements, and operations that would occur with the addition of approved projects within the area. The following development conditions are evaluated in this chapter:

- Background Conditions
- Background plus Project Conditions

Background Transportation Improvements

Per discussions with the City of Saratoga there are no planned road network capacity improvements in the Project study area, nor are there any intersections expected to be constructed prior to Background Conditions or the Project opening. Therefore, Existing (2019) Conditions geometries and intersection control are assumed for Background Conditions. In addition, no Background signalization improvements are assumed for any of the study intersections.

Figure 9 illustrates the intersection geometry and traffic control assumed for Background Conditions and Background plus Project Conditions.

Background Developments Traffic Volume

To determine Background volume forecasts, the following approved/pending projects were added to Existing (2019) volumes:

- Sebastian's Mixed-Use Project at 14360 Big Basin Way
  - 1,718 square foot restaurant, 1,204 square feet of office space, and 1330 square foot wine tasting room
- Sam Cloud Annex at 20640 Third Street
  - 569 square feet of office space, 871 square foot wine bar, 921 square foot restaurant, and two residential units

These background developments are both located near Route 9 in Saratoga Village. Background trips were distributed along Intersections 1 and 2.

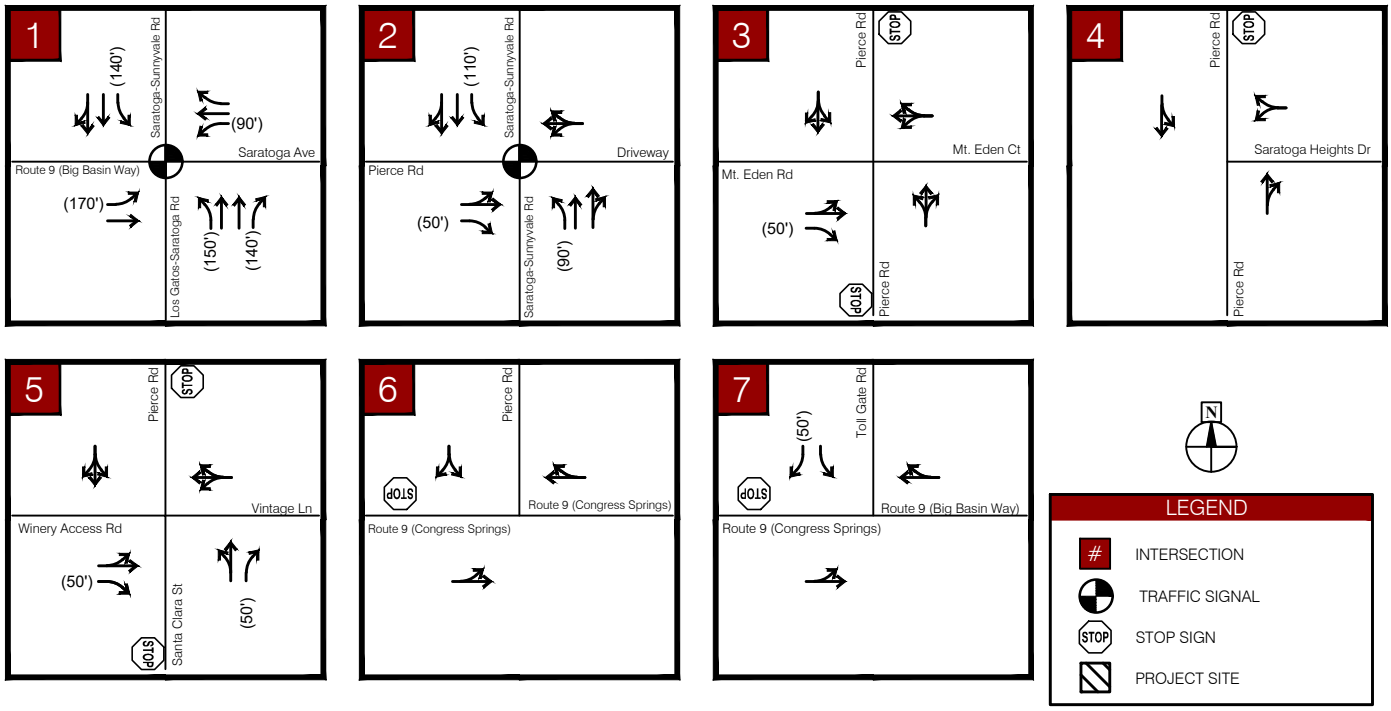
Background peak hour volumes are presented in **Figure 10**.

Background Intersection Level of Service

Background conditions were evaluated at the study intersections based on lane geometry and traffic control illustrated in **Figure 9** and peak hour volumes in **Figure 10**.

All study intersections currently operate at an acceptable LOS during Background Conditions.

Results of the analysis are presented in **Table 7** and TRAFFIX output sheets are provided in the **Appendix**.



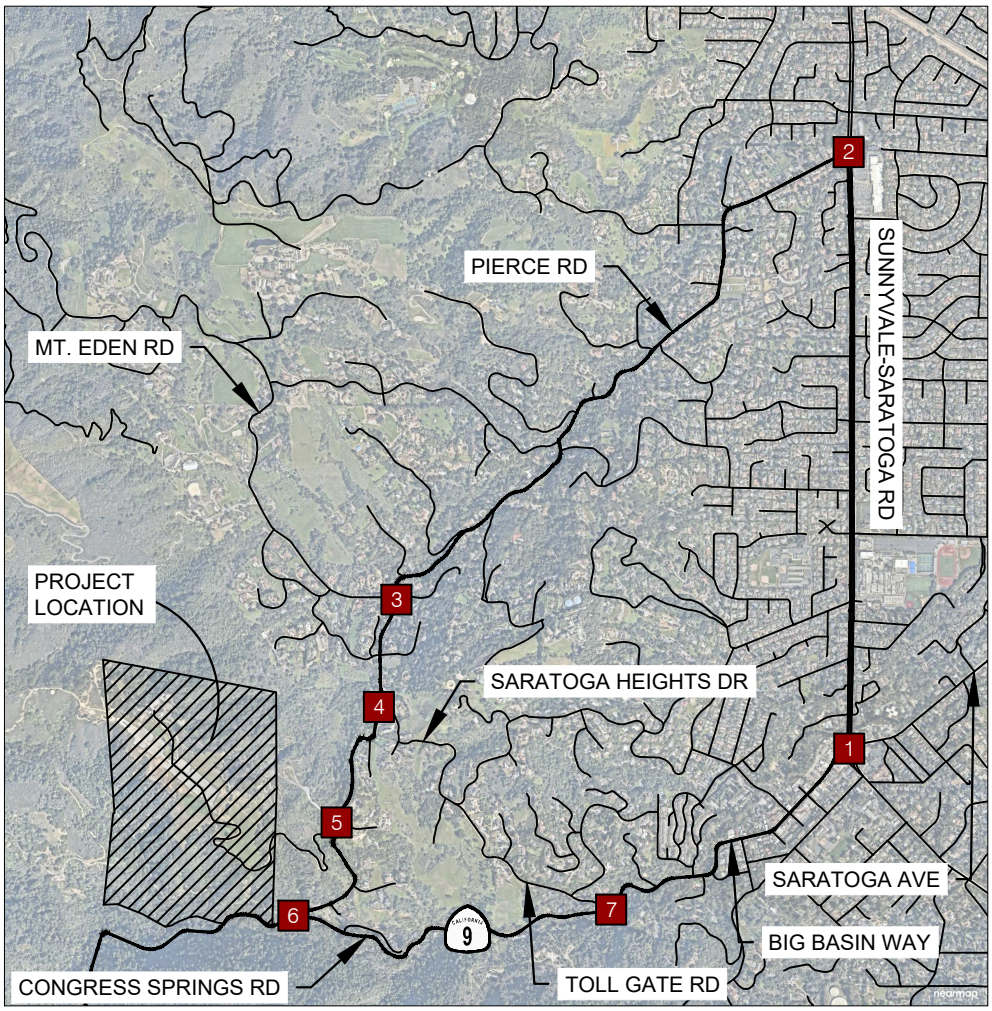


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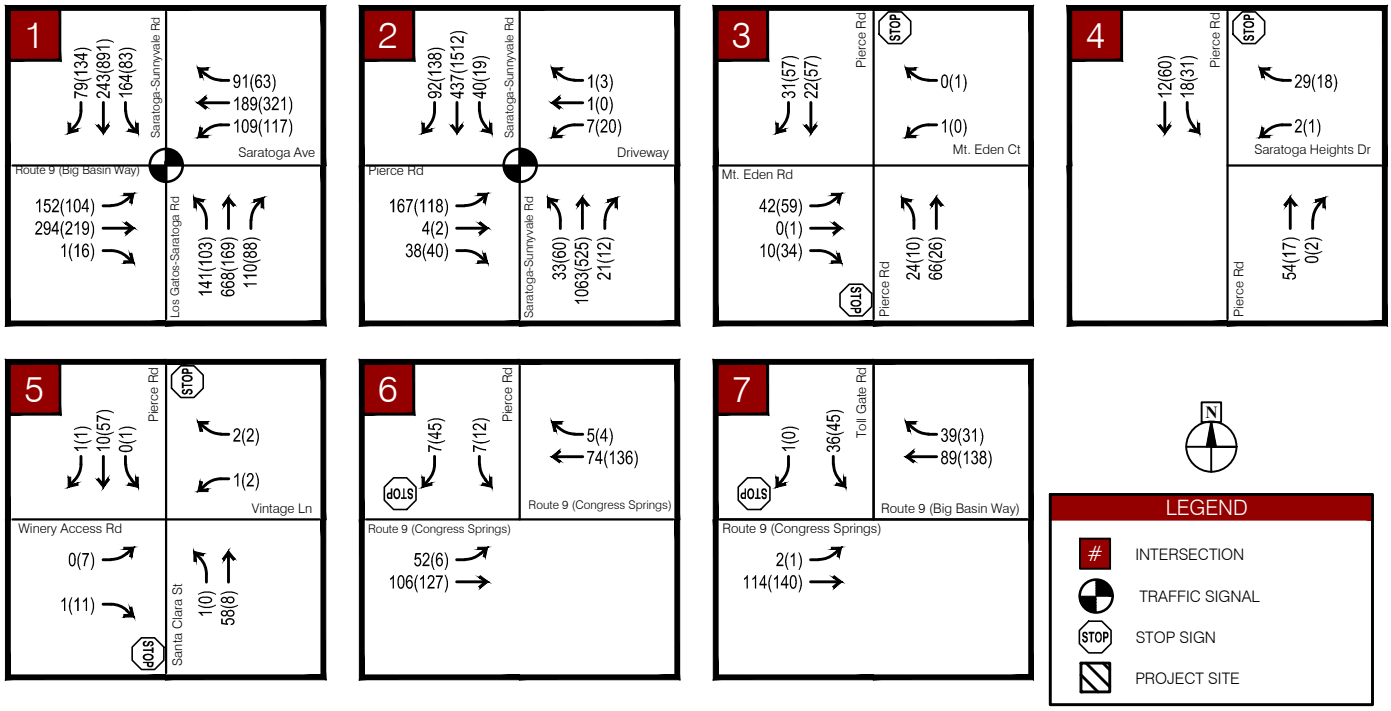
FIGURE 9
BACKGROUND CONDITIONS
LANE GEOMETRY AND TRAFFIC CONTROL



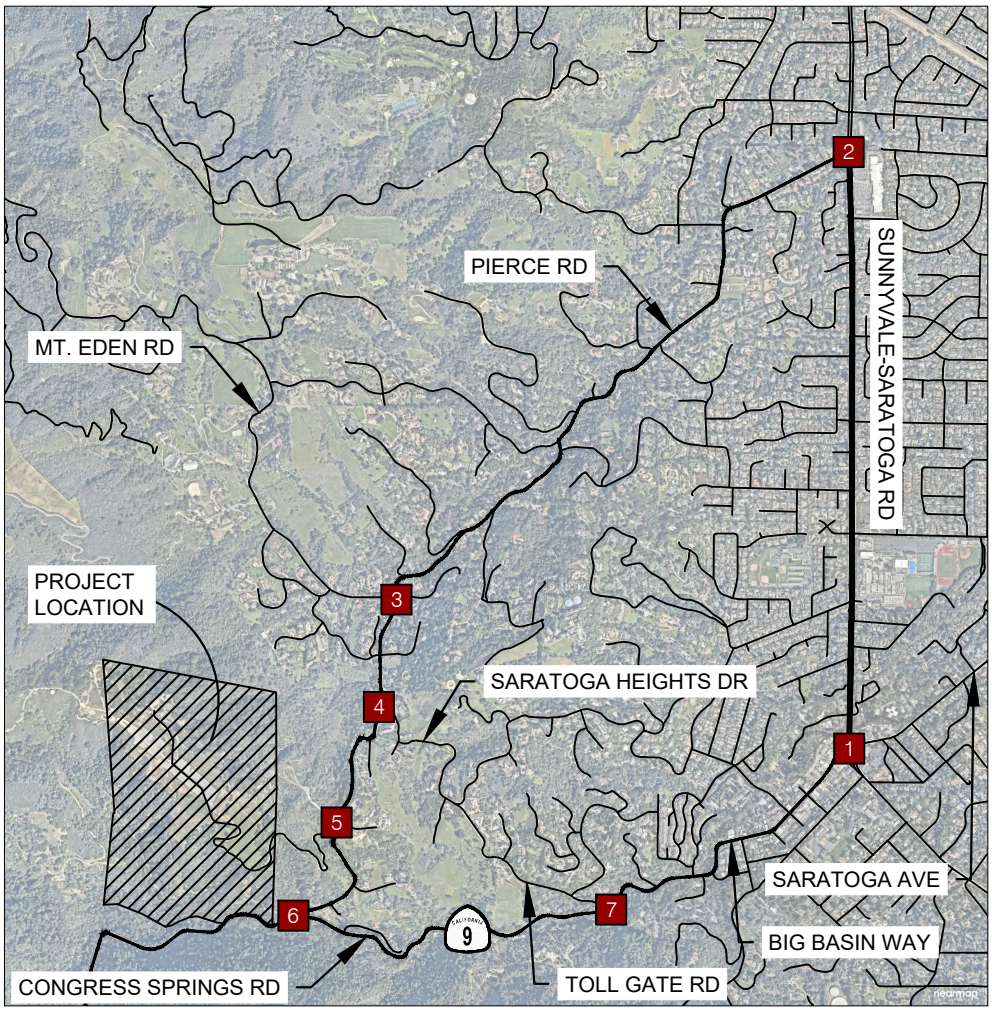


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FIGURE 10
BACKGROUND CONDITIONS
PEAK HOUR TURNING MOVEMENT VOLUMES

Table 7 – Background Conditions Intersection Level of Service

#	Intersection	Maintaining Agency	Control Type	Background Conditions					
				AM Peak Hour			PM Peak Hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS
1	Sunnyvale-Saratoga Ave & Big Basin Way/Saratoga Ave	Caltrans/VTA	Signal	-	38.0	D+	-	34.0	C-
2	Sunnyvale-Saratoga Ave & Pierce Rd	Saratoga	Signal	-	13.9	B	-	13.1	B
3	Pierce Rd & Mt Eden Rd/Mt Eden Ct	Saratoga	SSSC	-	4.3	A	-	3.7	A
	Worst Approach			*EB*	*9.8*	*A*	*EB*	*9.6*	*A*
4	Pierce Rd & Saratoga Heights Dr	Saratoga	SSSC	-	4.0	A	-	2.9	A
	Worst Approach			*WB*	*8.8*	*A*	*WB*	*8.6*	*A*
5	Pierce Rd & Winery Access/Vintage Ln	Saratoga	SSSC	-	1.4	A	-	3.2	A
	Worst Approach			*WB*	*8.8*	*A*	*EB*	*8.9*	*A*
6	Pierce Rd & Route 9 (Congress Springs)	Caltrans	SSSC	-	2.3	B	-	2.4	A
	Worst Approach			*SB*	*10.1*	*B*	*SB*	*9.7*	*A*
7	Route 9 (Congress Springs) & Toll Gate Rd	Caltrans	SSSC	-	1.8	B	-	1.5	B
	Worst Approach			*SB*	*10.5*	*B*	*SB*	*10.9*	*B*

Notes:
1. Analysis performed using HCM 2000 Edition methodologies with TRAFFIX Software
2. Delay indicated in seconds/vehicle.
3. Signal = Signal Control; AWSC = All-Way Stop Control; SSSC = Side-Street Stop Control
4. City of Saratoga LOS standard is D, VTA CMP LOS standard is E, Caltrans LOS standard is C/D
*5. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.***

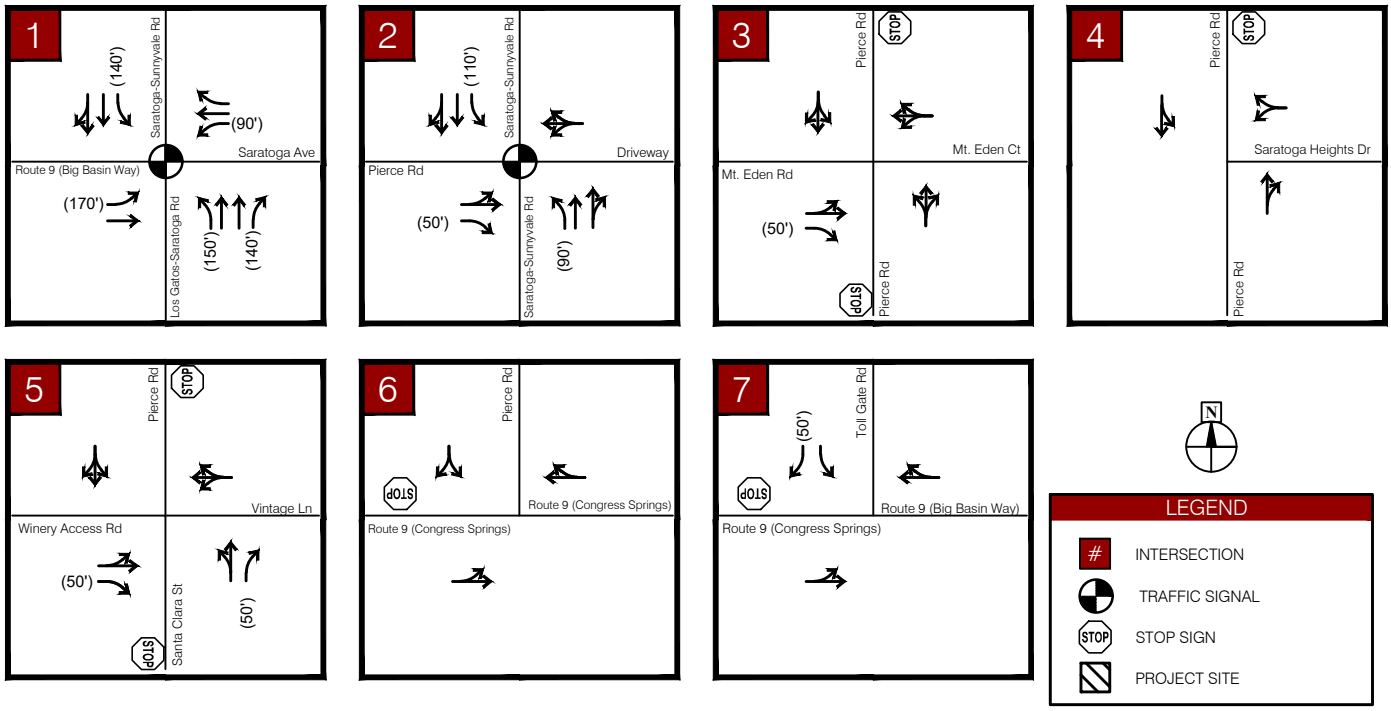
Background Plus Project Intersection Level of Service

Traffic operations were evaluated at the study intersections based on Background Plus Project conditions. Background Plus Project lane geometry and traffic control are shown in **Figure 11** and Background Plus Project peak hour traffic volumes are shown in **Figure 12**.

No study intersections would degrade from acceptable LOS without the Project, to unacceptable LOS with the Project under Background plus Project conditions.

Background Plus Project analysis results are presented in **Table 8**. TRAFFIX output sheets are provided in the **Appendix**.

It should be noted that for some intersections, the reported delay improved with the addition of the project trips. The reason for this occurrence is because the trips were predominately added to the through lane movements, which had a lower movement delay than the average intersection delay, and thereby decreases the overall average delay.



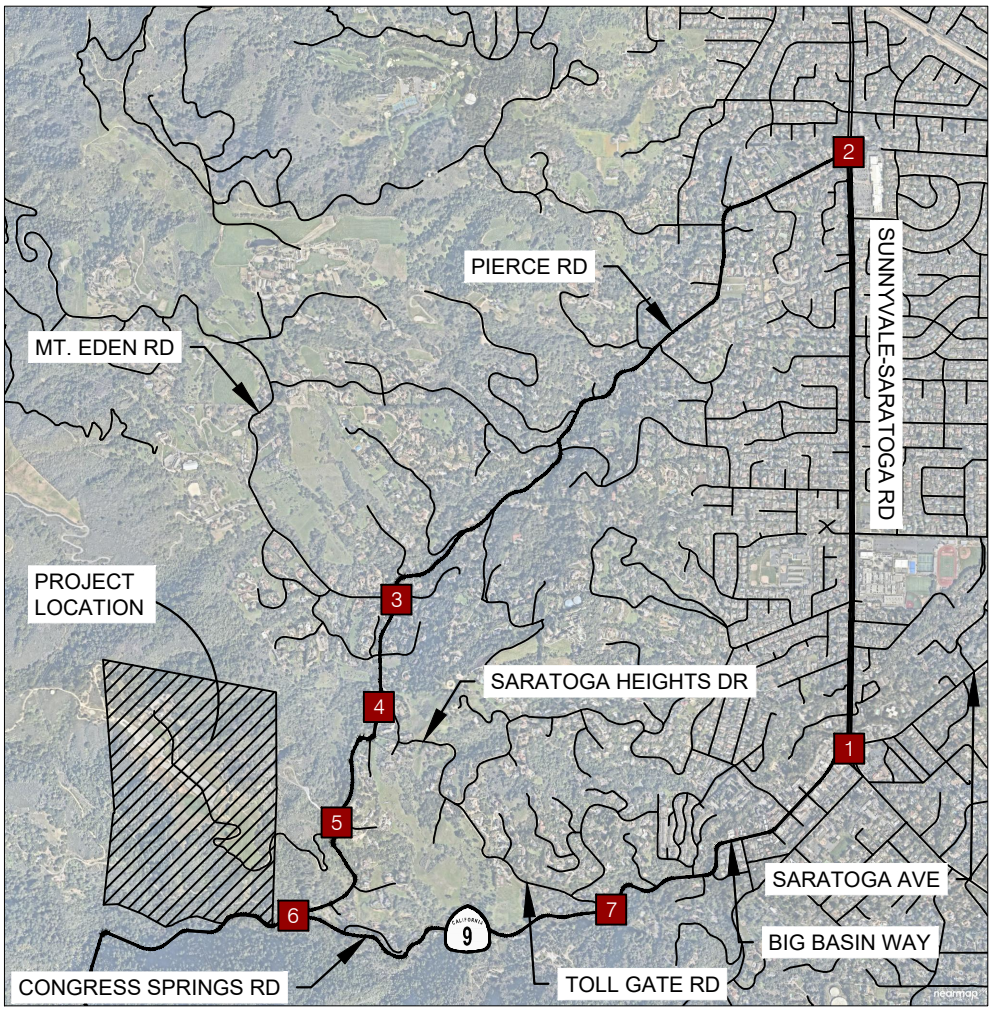


FIGURE 11
BACKGROUND PLUS PROJECT CONDITIONS
LANE GEOMETRY AND TRAFFIC CONTROL

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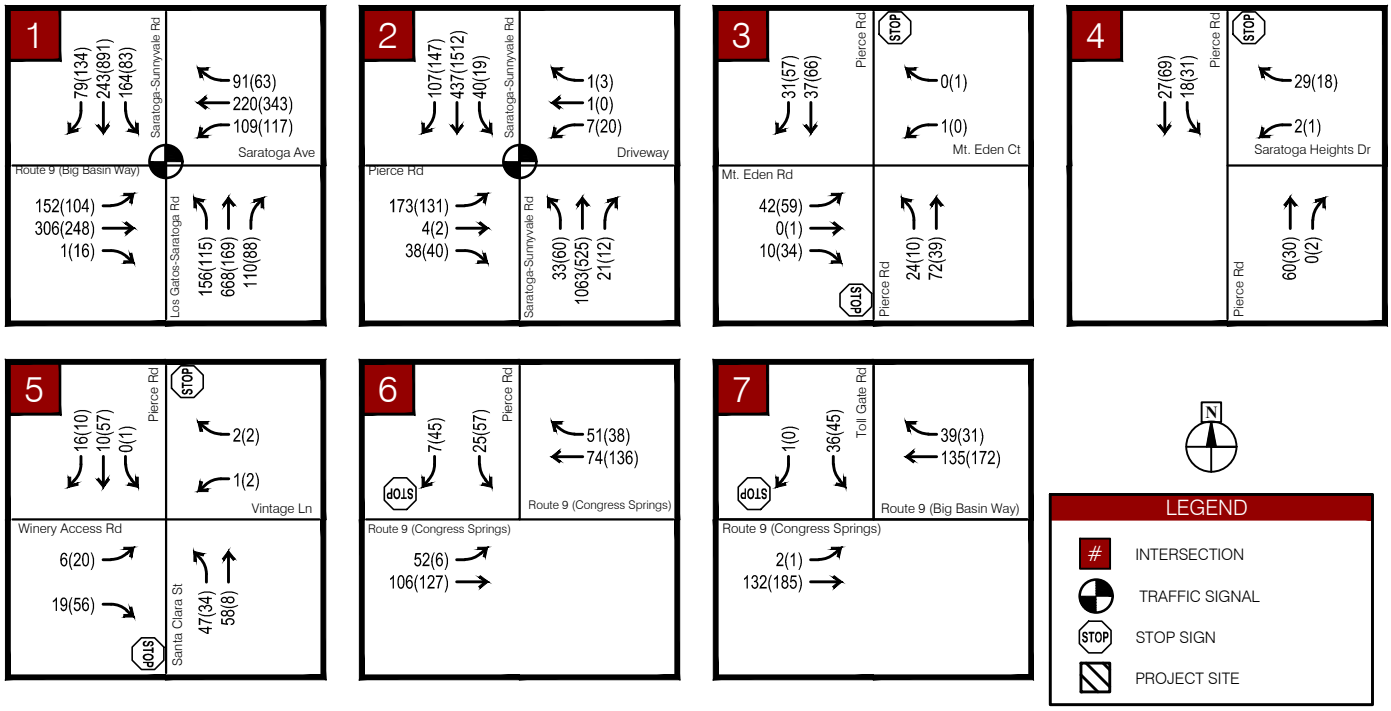

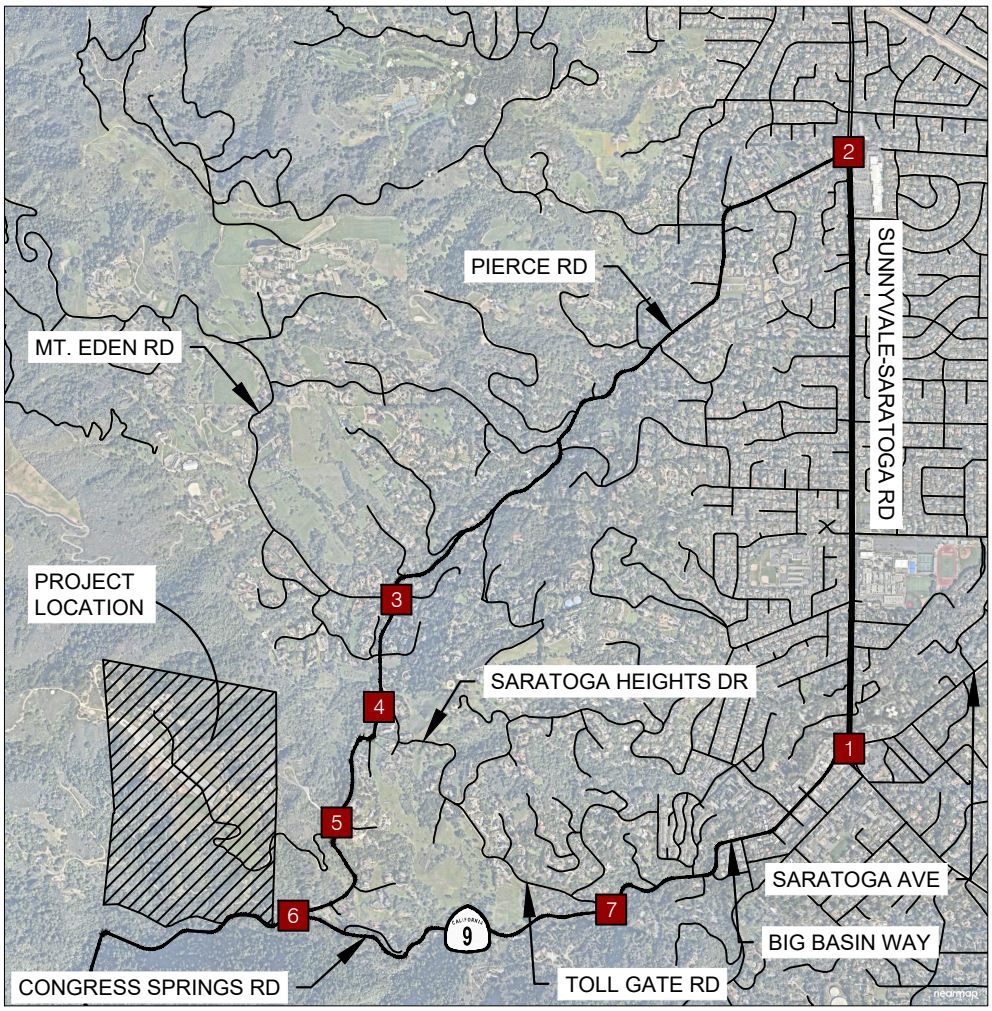

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FIGURE 12
BACKGROUND PLUS PROJECT CONDITIONS
PEAK HOUR TURNING MOVEMENT VOLUMES

Table 8 – Background Plus Project Conditions Intersection Level of Service

#	Intersection	Maintaining Agency	Control Type	Background Conditions						Background + Project Conditions					
				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS
1	Sunnyvale-Saratoga Ave & Big Basin Way/Saratoga Ave	Caltrans/VTA	Signal	-	38.0	D+	-	34.0	C-	-	38.5	D+	-	35.1	D+
2	Sunnyvale-Saratoga Ave & Pierce Rd	Saratoga	Signal	-	13.9	B	-	13.1	B	-	14.1	B	-	13.8	B
3	Pierce Rd & Mt Eden Rd/Mt Eden Ct	Saratoga	SSSC	-	4.3	A	-	3.7	A	-	4.0	B	-	3.4	A
	Worst Approach			*EB*	*9.8*	*A*	*EB*	*9.6*	*A*	*EB*	*10.0*	*B*	*EB*	*9.8*	*A*
4	Pierce Rd & Saratoga Heights Dr	Saratoga	SSSC	-	4.0	A	-	2.9	A	-	3.4	A	-	2.4	A
	Worst Approach			*WB*	*8.8*	*A*	*WB*	*8.6*	*A*	*WB*	*8.9*	*A*	*WB*	*8.7*	*A*
5	Pierce Rd & Winery Access/Vintage Ln	Saratoga	SSSC	-	1.4	A	-	3.2	A	-	5.0	A	-	6.2	A
	Worst Approach			*WB*	*8.8*	*A*	*EB*	*8.9*	*A*	*WB*	*9.3*	*A*	*WB*	*9.7*	*A*
6	Pierce Rd & Route 9 (Congress Springs)	Caltrans	SSSC	-	2.3	B	-	2.4	A	-	2.7	B	-	3.6	B
	Worst Approach			*SB*	*10.1*	*B*	*SB*	*9.7*	*A*	*SB*	*11.3*	*B*	*SB*	*11.0*	*B*
7	Route 9 (Congress Springs) & Toll Gate Rd	Caltrans	SSSC	-	1.8	B	-	1.5	B	-	1.6	B	-	1.4	B
	Worst Approach			*SB*	*10.5*	*B*	*SB*	*10.9*	*B*	*SB*	*11.2*	*B*	*SB*	*11.7*	*B*

Notes:
1. Analysis performed using HCM 2000 Edition methodologies with TRAFFIX Software
2. Delay indicated in seconds/vehicle.
3. Signal = Signal Control; AWSC = All-Way Stop Control; SSSC = Side-Street Stop Control
4. City of Saratoga LOS standard is D, VTA CMP LOS standard is E, Caltrans LOS standard is C/D
*5. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.***

6. CUMULATIVE (2040) CONDITIONS

Traffic operations were evaluated under the following cumulative conditions:

- Cumulative (2040) Conditions
- Cumulative (2040) Plus Project Conditions

Cumulative Transportation Network Improvements

As documented in FY 2018/2019 Operating and Capital Budget (May 2018), there are no funded vehicular capacity improvements planned in the Project study area nor are there any new intersections expected to be constructed by Cumulative year 2040. It is anticipated that basic signal timing improvements (cycle lengths, offset, and splits) would be implemented by 2040 to accommodate traffic volume growth. Existing (2019) Conditions geometries and intersection control are assumed for Cumulative (2040) conditions.

Figure 13 illustrates the intersection geometry and traffic control used in the Cumulative (2040) conditions analysis. It is assumed that signal timing changes would be implemented prior 2040 to service traffic pattern changes and increases. No physical capacity improvements, new signalization, or phasing changes from Existing and Background Conditions are assumed.

Cumulative Volumes

Cumulative volume growth in the study area was determined based on an evaluation of the County's pending, approved, and future projects list, which was provided by City of Saratoga Staff. The VTA 2040 travel demand model forecasts were also utilized to estimate future volume growth in the study area.

The current VTA 2040 travel demand model is in the process of being updated; however, the City of Saratoga provided annual volume growth rates for the following roadways:

- 2.5% growth per year on Highway 9 due to growth in regional traffic
- 0.8% growth per year on all other roadways within the City of Saratoga

Per VTA TIA (October 2014) Long-Term guidelines, the growth rates above were applied to the Background Conditions (Existing plus approved/pending projects). Approved/pending projects that were added to existing volumes include the following:

- Sebastian's Mixed-Use Project at 1436 Big Basin Way
- Sam Cloud Annex at 20640 Third Street

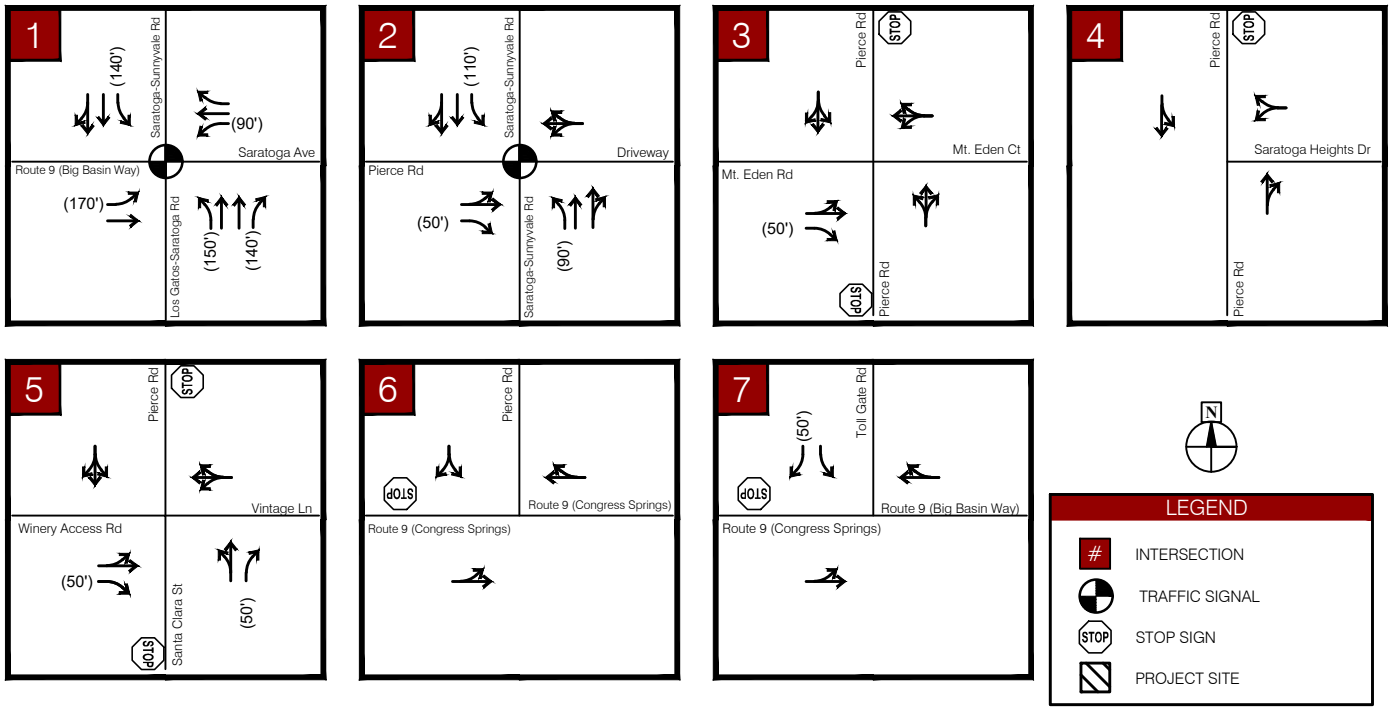
Cumulative peak hour traffic volumes are shown in **Figure 14**.

Cumulative Intersection Level of Service

Traffic operations were evaluated at the study intersections based on Cumulative lane geometry and traffic control as shown in **Figure 13** and Cumulative peak hour traffic volumes as shown in **Figure 14**.

All study intersections operate at an acceptable LOS for Cumulative (2040) Conditions.

Results of the analysis are presented in **Table 9** and TRAFFIX output sheets are provided in the **Appendix**.



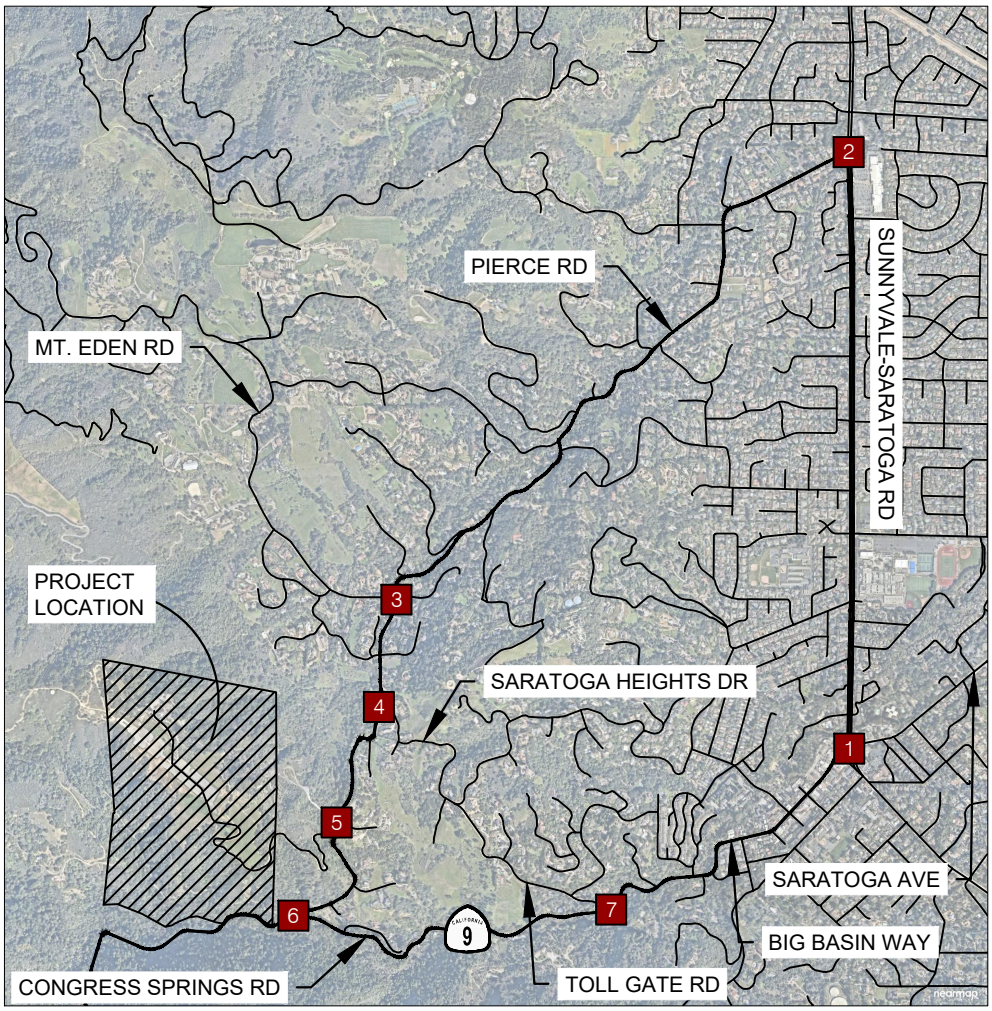


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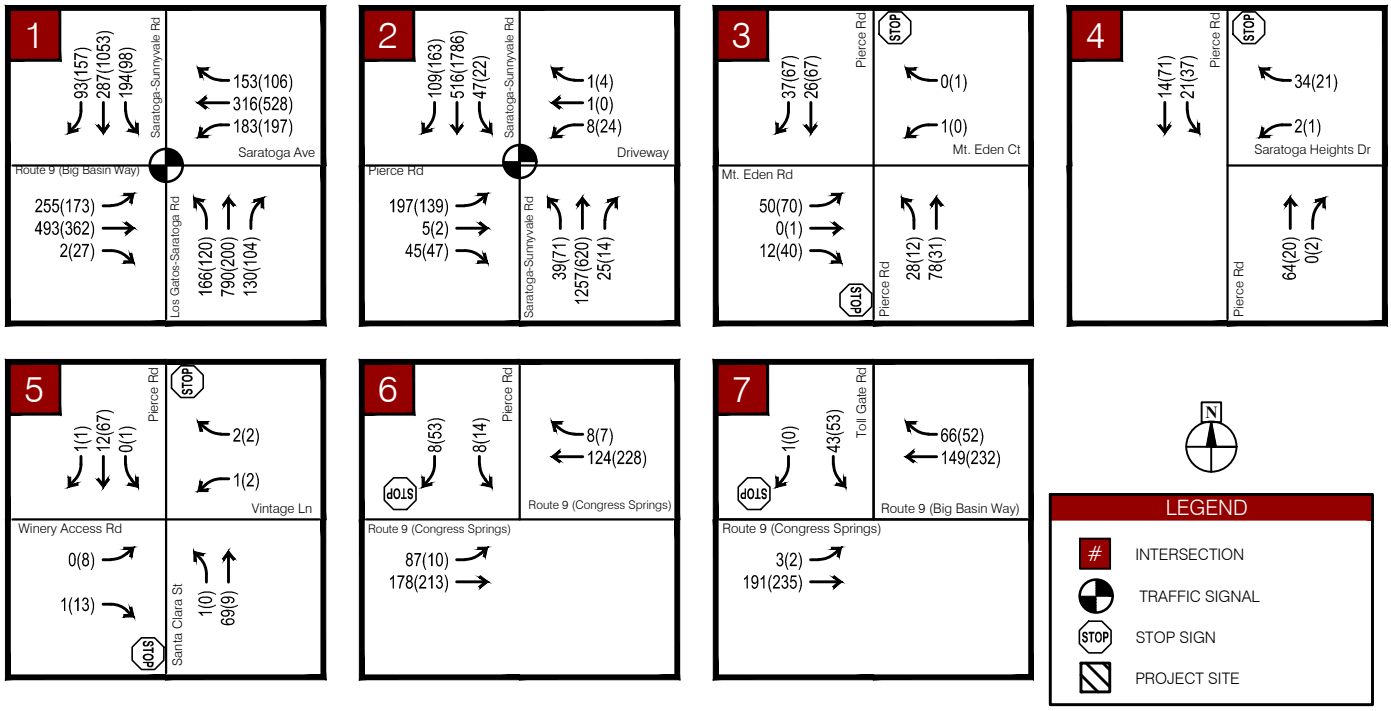
FIGURE 13
CUMULATIVE CONDITIONS
LANE GEOMETRY AND TRAFFIC CONTROL



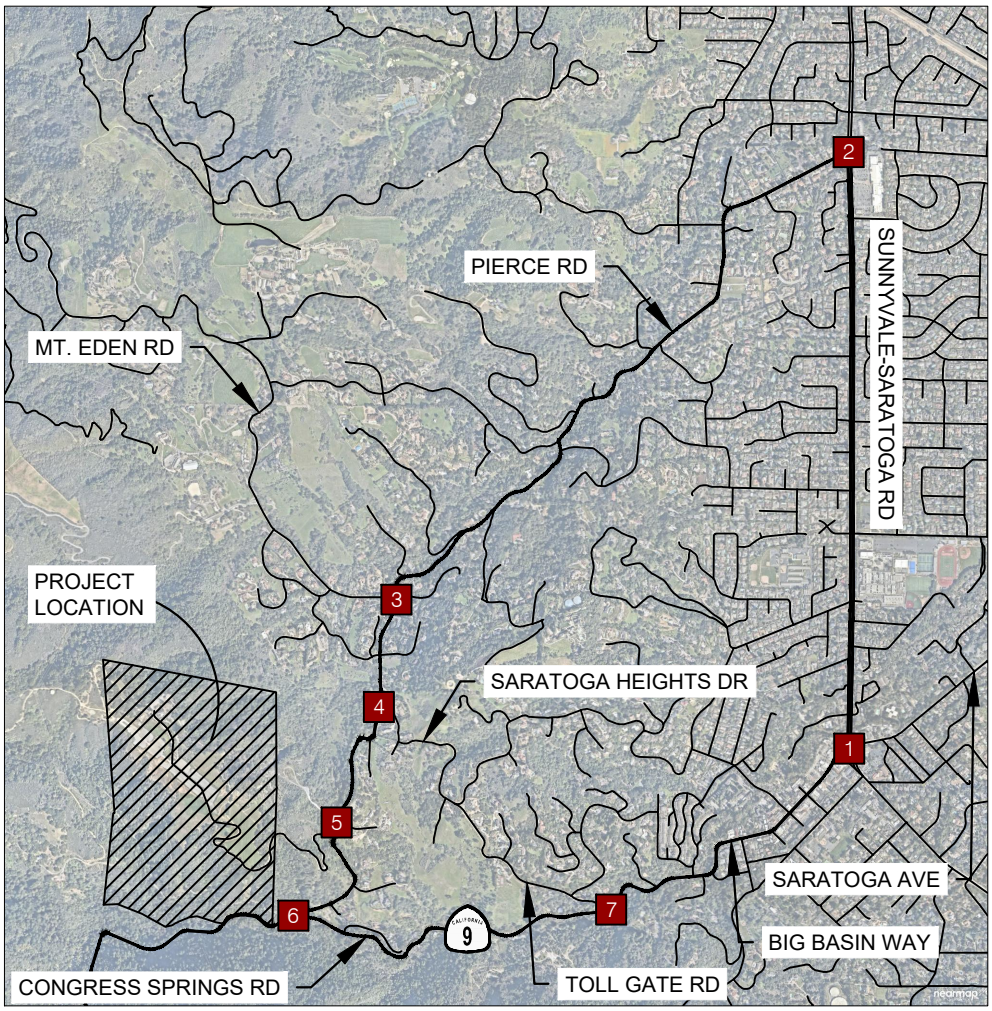


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FIGURE 14
CUMULATIVE CONDITIONS
PEAK HOUR TURNING MOVEMENT VOLUMES

Table 9 – Cumulative Conditions Intersection Level of Service

#	Intersection	Maintaining Agency	Control Type	Cumulative (2040) Conditions					
				AM Peak Hour			PM Peak Hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS
1	Sunnyvale-Saratoga Ave & Big Basin Way/Saratoga Ave	Caltrans/VTA	Signal	-	53.0	D-	-	48.2	D
2	Sunnyvale-Saratoga Ave & Pierce Rd	Saratoga	Signal	-	14.7	B	-	15.2	B
3	Pierce Rd & Mt Eden Rd/Mt Eden Ct	Saratoga	SSSC	-	4.5	B	-	3.8	A
	Worst Approach			*EB*	*10.2*	*B*	*EB*	*9.9*	*A*
4	Pierce Rd & Saratoga Heights Dr	Saratoga	SSSC	-	4.0	A	-	2.9	A
	Worst Approach			*WB*	*9.0*	*A*	*WB*	*8.6*	*A*
5	Pierce Rd & Winery Access/Vintage Ln	Saratoga	SSSC	-	1.4	A	-	3.2	A
	Worst Approach			*WB*	*8.9*	*A*	*EB*	*9.0*	*A*
6	Pierce Rd & Route 9 (Congress Springs)	Caltrans	SSSC	-	2.3	B	-	2.0	B
	Worst Approach			*SB*	*11.8*	*B*	*SB*	*10.9*	*B*
7	Route 9 (Congress Springs) & Toll Gate Rd	Caltrans	SSSC	-	1.6	B	-	1.4	B
	Worst Approach			*SB*	*12.5*	*B*	*SB*	*13.4*	*B*

Notes:
1. Analysis performed using HCM 2000 Edition methodologies with TRAFFIX Software
2. Delay indicated in seconds/vehicle.
3. Signal = Signal Control; AWSC = All-Way Stop Control; SSSC = Side-Street Stop Control
4. City of Saratoga LOS standard is D, VTA CMP LOS standard is E, Caltrans LOS standard is C/D
*5. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.***

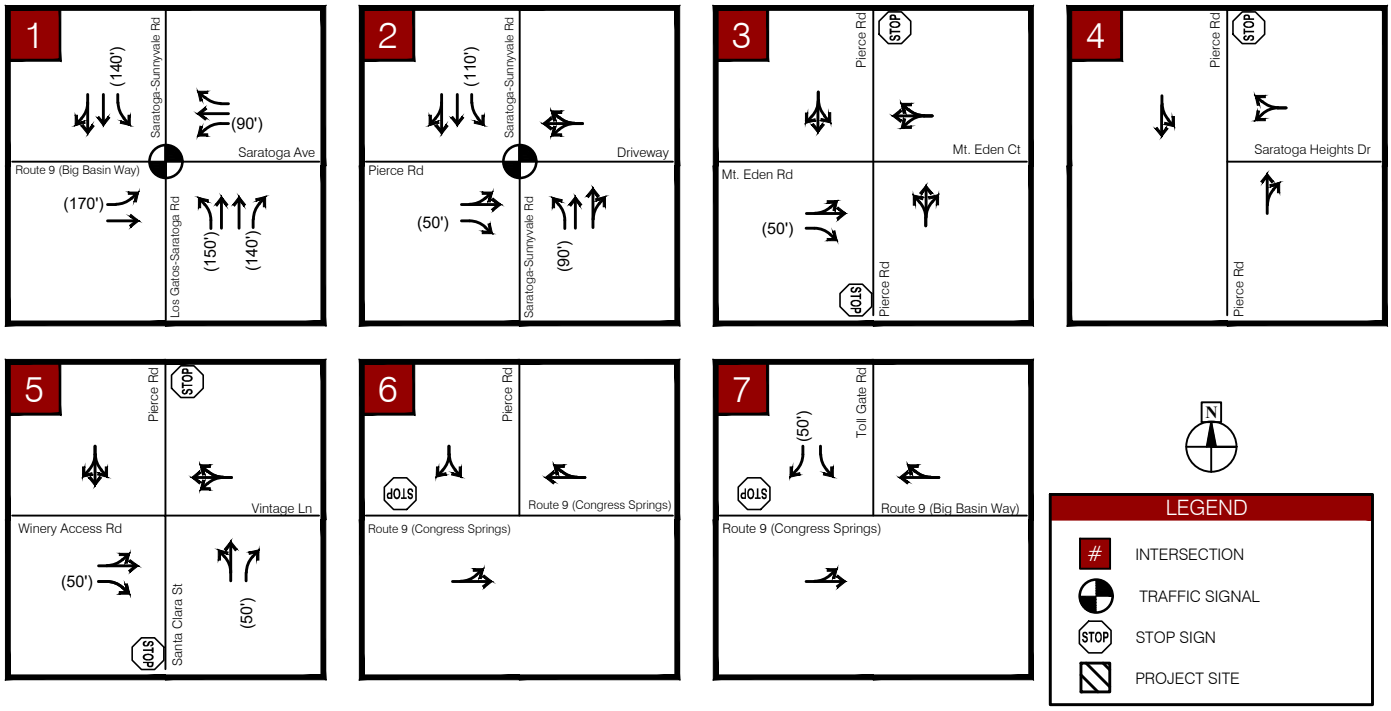
Cumulative Plus Project Intersection Level of Service

Traffic operations were evaluated at the study intersections based on Cumulative (2040) Plus Project Conditions. Cumulative Plus Project lane geometry and traffic control is shown in **Figure 15** and Cumulative Plus Project peak hour traffic volumes are shown in **Figure 16**.

No study intersections would degrade from an acceptable LOS without the Project, to unacceptable LOS with the Project under Cumulative (2040) plus Project conditions.

Cumulative Plus Project analysis results are presented in **Table 10**. TRAFFIX output sheets are provided in the **Appendix**.

It should be noted that for some intersections, the reported delay improved with the addition of the project trips. The reason for this occurrence is because the trips were predominately added to the through lane movements, which had a lower movement delay than the average intersection delay, and thereby decreases the overall average delay.



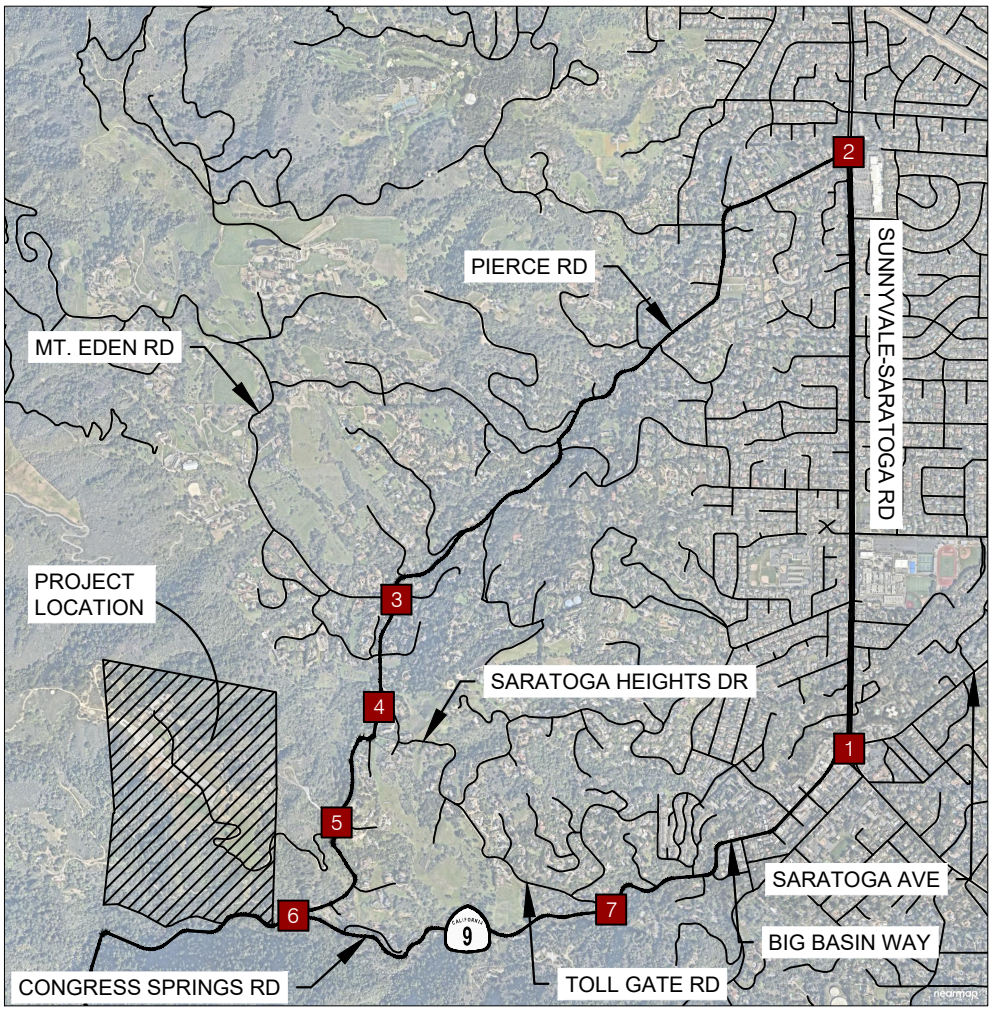


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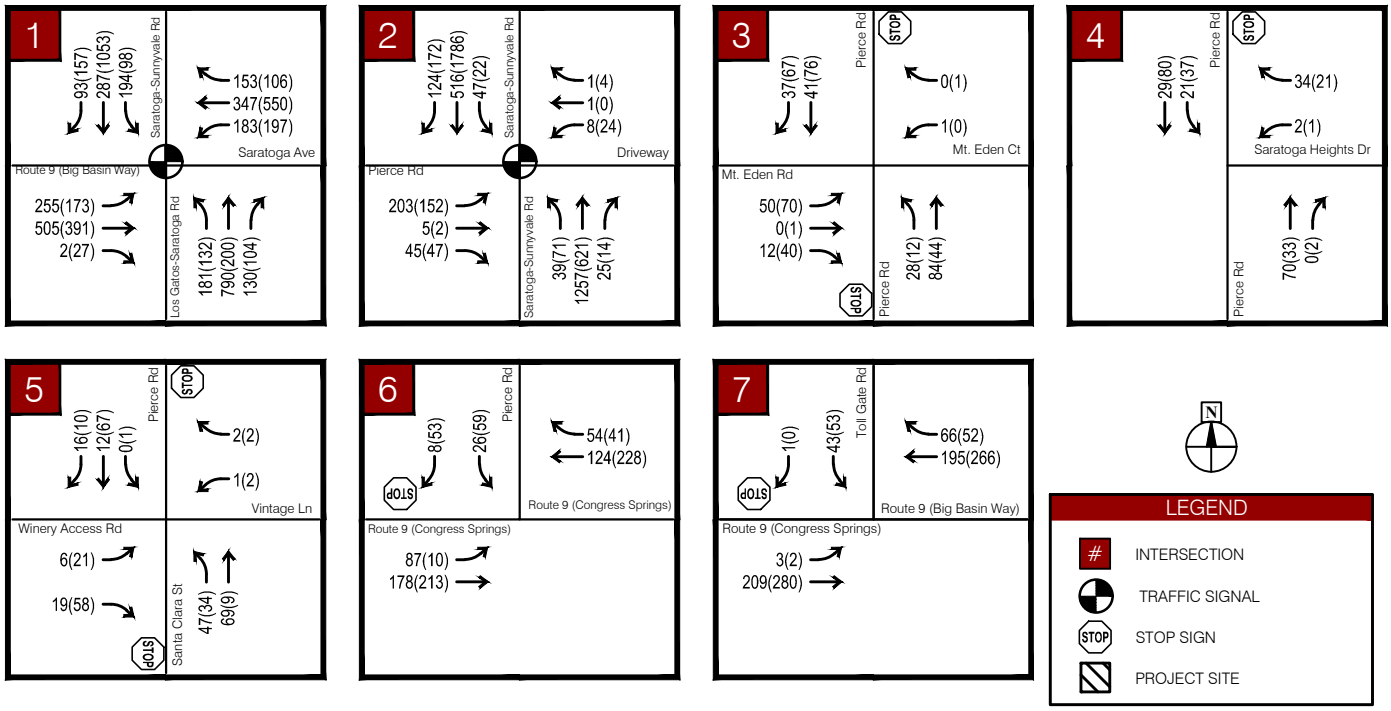
FIGURE 15
CUMULATIVE PLUS PROJECT CONDITIONS
LANE GEOMETRY AND TRAFFIC CONTROL



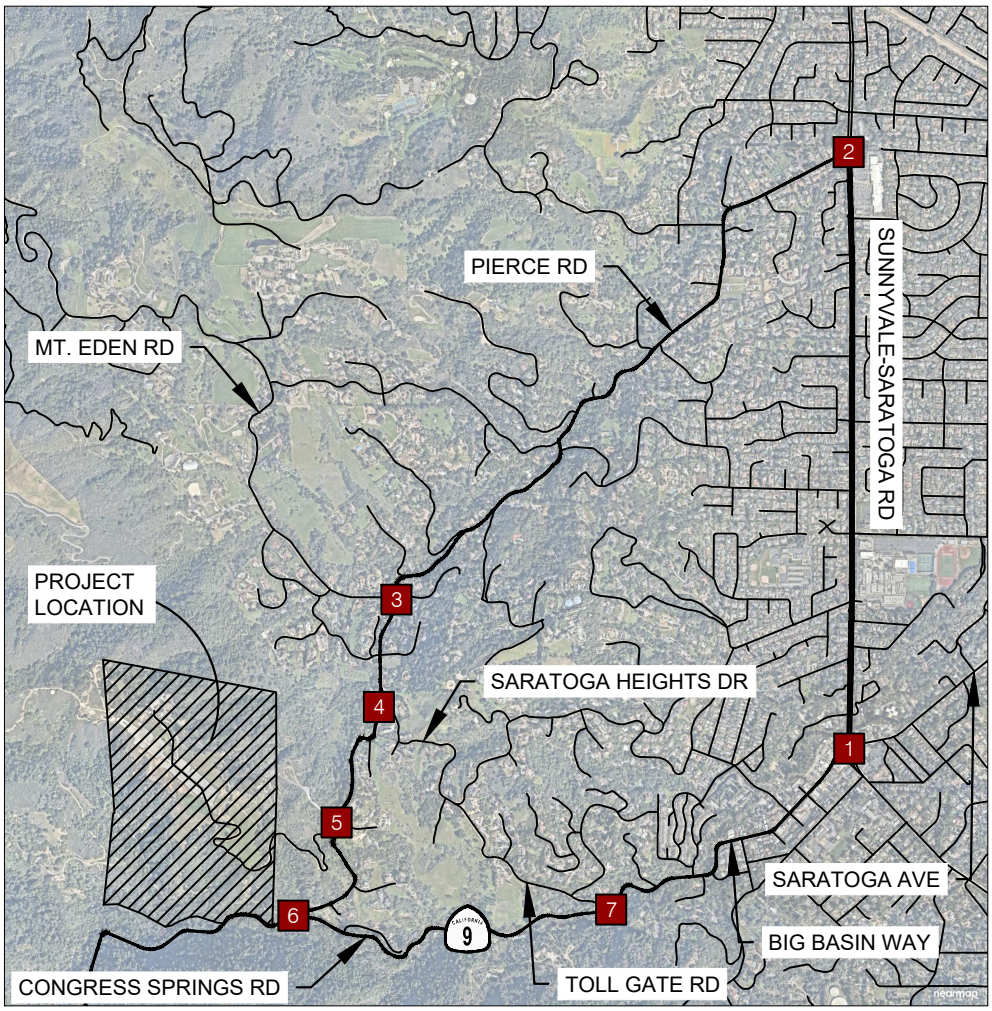


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FIGURE 16
CUMULATIVE PLUS PROJECT CONDITIONS
PEAK HOUR TURNING MOVEMENT VOLUMES

Table 10 – Cumulative Plus Project Conditions Intersection Level of Service

#	Intersection	Maintaining Agency	Control Type	Cumulative Conditions						Cumulative + Project Conditions					
				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
				MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS	MVMT	Delay	LOS
1	Sunnyvale-Saratoga Ave & Big Basin Way/Saratoga Ave	Caltrans/VTA	Signal	-	53.0	D-	-	48.2	D	-	54.7	D-	-	51.2	D-
2	Sunnyvale-Saratoga Ave & Pierce Rd	Saratoga	Signal	-	14.7	B	-	15.2	B	-	14.9	B	-	16.0	B
3	Pierce Rd & Mt Eden Rd/Mt Eden Ct	Saratoga	SSSC	-	4.5	B	-	3.8	A	-	4.2	B	-	3.6	B
	Worst Approach			*EB*	*10.2*	*B*	*EB*	*9.9*	*A*	*EB*	*10.4*	*B*	*EB*	*10.1*	*B*
4	Pierce Rd & Saratoga Heights Dr	Saratoga	SSSC	-	4.0	A	-	2.9	A	-	3.5	A	-	2.5	A
	Worst Approach			*WB*	*9.0*	*A*	*WB*	*8.6*	*A*	*WB*	*9.0*	*A*	*WB*	*8.7*	*A*
5	Pierce Rd & Winery Access/Vintage Ln	Saratoga	SSSC	-	1.4	A	-	3.2	A	-	4.8	A	-	6.0	A
	Worst Approach			*WB*	*8.9*	*A*	*EB*	*9.0*	*A*	*WB*	*9.4*	*A*	*WB*	*9.8*	*A*
6	Pierce Rd & Route 9 (Congress Springs)	Caltrans	SSSC	-	2.3	B	-	2.0	B	-	2.8	B	-	3.4	B
	Worst Approach			*SB*	*11.8*	*B*	*SB*	*10.9*	*B*	*SB*	*14.1*	*B*	*SB*	*13.2*	*B*
7	Route 9 (Congress Springs) & Toll Gate Rd	Caltrans	SSSC	-	1.6	B	-	1.4	B	-	1.5	B	-	1.3	B
	Worst Approach			*SB*	*12.5*	*B*	*SB*	*13.4*	*B*	*SB*	*13.5*	*B*	*SB*	*14.7*	*B*

Notes:
1. Analysis performed using HCM 2000 Edition methodologies with TRAFFIX Software
2. Delay indicated in seconds/vehicle.
3. Signal = Signal Control; AWSC = All-Way Stop Control; SSSC = Side-Street Stop Control
4. City of Saratoga LOS standard is D, VTA CMP LOS standard is E, Caltrans LOS standard is C/D
*5. Intersections that operate below maintaining agency's LOS standard are highlighted and shown in **bold.***

7. PARKING AND TRANSPORTATION DEMAND MANAGEMENT

The following sections discuss the proposed on-site parking supply and potential Transportation Demand Management options to be implemented by the Project.

On-Site Parking

On-site parking was evaluated based on the Project description and City of Saratoga Municipal Code Section 15-35.030 (dated March 14, 2019).

If a deficiency of parking occurs, the Mountain Winery may expand parking as needed within the Precise Plan area. Vehicular parking at the Mountain Winery is currently allocated as follows:

- 933 Total Spaces (Employee, Visitor, Etc.)
    - 908 Standard Parking Spaces
    - 20 ADA Spaces
    - 5 Commercial/Bus Spaces

To determine the worst-case scenario for required parking, previous studies were utilized because the size of the events on the Mountain Winery site are not changing. From the analysis completed in previous studies, it was determined that the concert requires the most amount of parking at the Project site with a maximum of 2,500 attendees and 50 employees (number of employees range from 25 to 50). In addition, the 830 square foot wine tasting room was included to conservatively estimate the required number of existing parking spaces. This is a conservative estimate because it assumes that additional parking will be needed for visitors who visit the winery the day of a concert but only use the wine tasting room.

Due to the nature of the Mountain Winery site, parking is shared among the various land uses on the site; therefore, if the site is prepared for the worst-case scenario, all other events would have acceptable parking. It was also assumed that both a concert event and any other event would not occur at the same time.

City of Saratoga Municipal Requirements

Table 11 summarizes the parking requirements for the existing uses and proposed Project based on the City of Saratoga Municipal Code from Section 15-35.030 (March 14, 2019)

Table 11 – Municipal Code Parking Requirements

Land Use Description	Rate	No. of Units	Spaces Required
Existing Conditions			
Auditorium	1 space for each 4 seats	2,500 seats	625
Staff for Concert Event	One space for each two employees	50 employees	25
Wine Tasting	One space for each 75 SQFT of floor area	830 SQFT	12
		Total Spaces	**662**
Project Conditions			
Hotel	One space for each guestroom or for each two beds, whichever is greater	300 rooms	300
		TOTAL SPACES REQUIRED	**962**
		TOTAL EXISTING SPACES	**933**
		PARKING SURPLUS (PARKING DEFICENCY)	**(29)**

As summarized in **Table 11**, the proposed Project is required to provide 300 vehicle parking spaces and zero (0) bicycle parking spaces. The current site contains 933 total spaces and the existing and approved land uses require 662 parking spaces. This results in a deficiency of 29 parking spaces on the project site. This deficiency will likely occur a few times per year and parking may be expanded as needed within the Precise Plan area. Therefore, the Winery should be able to accommodate proposed hotel parking along with the existing uses.

The current site provides 20 ADA spaces. According to the 2010 ADA Standards for Accessible Design, a site with 933 total spaces requires 2% of the parking be designated as ADA parking. Therefore, 19 spaces are required on the Mountain Winery site and the existing 20 ADA spaces comply with ADA standards.

8. POTENTIAL IMPACTS ON PEDESTRIAN, BICYCLE, AND TRANSIT MOBILITY

The Project was evaluated to determine if it would adversely affect adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) or generate pedestrian, bicycle, or transit travel demand that would not be accommodated by transit, bicycle, or pedestrian facilities and plans.

Pedestrian Mobility

There is currently no pedestrian access to/from the Project site. Sidewalks along the Mountain Winery driveway are not recommended because they would not connect to any existing sidewalks and would dead end at Pierce Road. In addition, the grade is approximately 9.5% which is too steep to create a sidewalk that is American with Disabilities Act (ADA) compliant.

Therefore, the Project is not anticipated to have pedestrian trips to/from the Project site.

Bicycle Mobility

Bicyclists currently share the road with vehicles on Pierce Road and Highway 9; however, bicyclist were not observed using the Project Driveway. Bicycle lanes along the Mountain Winery driveway are not recommended because the bicycle lanes would not connect to any existing bicycle routes. In addition, the existing driveway varies in width and may not be able to safely accommodate bicyclists in both directions and vehicles accessing the Project site.

Therefore, the Project is not anticipated to have bicycle trips to/from the Project site.

Transit Mobility

The Mountain Winery site is not located within the general service area for VTA services. Therefore, the Project is not anticipated to have transit trips to/from the Project site.

Summary of Potential Impacts

This chapter of the report evaluated pedestrian, bicycle, and transit networks in the Project vicinity and whether impacts would be caused by construction of the proposed Project. As discussed in this chapter, the Project impact on pedestrian, bicycle, and/or transit facilities would be less than significant.

9. VEHICLE MILES TRAVELED

With the passage of SB 743, VMT has become an important indicator for determining if a new development would result in a "significant transportation impact". While jurisdictions (lead agencies) have until July 1, 2020 to adopt thresholds of significance and fully implement the requirements of SB 743, it is increasingly becoming a best practice to provide this information to clarify a development's potential impact even if a jurisdiction has yet to fully implement the act.

This chapter documents Vehicle Miles Traveled (VMT) analysis completed for a proposed 300-room hotel to be located at the Mountain Winery in Saratoga, California. The proposed Mountain Winery hotel will host patrons who wish to stay at the property and participate in one of its many existing function that include:

- Concerts
- Weddings
- Business Meetings
- Deck Functions
- Social Events
- Special Events

Similar to how the prior Traffic Impact Analysis (dated May 4, 1999) handled these functions, they are assumed to be "…of a type, number, and attendance similar to the activities that have been ongoing at the Mountain Winery for the past 40 years" (approximately 60 years as of the preparation of this analysis).

The assumption that on-site activities at the Mountain Winery are currently offered is a key consideration for the VMT analysis completed. Based on this, it is reasonable to assume that while the proposed hotel will add some additional employment trips related to employees that work directly at the hotel, the hotel itself is expected to mostly serve existing patrons of the Mountain Winery. Simply, patrons of the proposed hotel are assumed to be already traveling to the Mountain Winery and are currently staying at an alternative hotel further away than the proposed hotel. These patrons would continue to stay at existing hotels further away from the Mountain Winery if the proposed hotel was not constructed. Based on the project description provided, the additional amenities offered by the proposed hotel are assumed to attract patrons who are not currently traveling to the Mountain Winery. Therefore, the analysis has been designed to conservatively estimate that 20-percent of patrons are adding new trips to the regional roadway network.

In order to appropriately capture the complexity of trip-making characteristics related to the hotel, the VMT analysis was segmented into four distinct elements: (1) VMT for the initial hotel guest trip (from their home to the Mountain Winery and back) (2) VMT for hotel employee commutes; (3) Other hotel trips including local hotel guest trips, visitors, or deliveries; and (4) determining the VMT impact of guests no longer staying at alternative local hotels (how this effects the net VMT of the hotel).

VMT and Hotel Uses

Hotels most often serve pre-existing needs (i.e. they typically do not generate new trips so much as meet existing demand). Because of this, most often they can be presumed to reduce trip lengths when a new hotel is introduced within a cluster of existing hotels located near a local destination or attraction. Essentially, a trip to a hotel is expected to occur due to someone planning to travel to the Mountain Winery, or the immediate area, but the proximity of the hotel to the Mountain Winery would drive the length of that trip and the resultant impact to the overall transportation system. Conversely, land uses such as residential and office often drive new trips given that they introduce new participants to the transportation system. Most often this means that the impact to the transportation system would be negligible or reduced by the introduction of a new hotel to an area where people are already traveling and planning on staying unless the hotel significantly effects the local supply of rooms or introduces a significant new attraction.

Methodology and Assumptions

While travel demand models (TDMs) are broadly considered to be amongst the most accurate of available tools to assess VMT, their use is not always an ideal fit depending on the unique characteristics of the project being evaluated. This was determined to be the case for VMT evaluation for the proposed hotel for two principal reasons: (1) based on available data it is assumed that this hotel will serve guests located throughout California. As such, the service area is well beyond the extent of the TDM maintained by the Santa Clara Valley Transportation Authority (VTA); and (2) the complexity of the proposed hotel in terms of its trip-making relationship with the Mountain Winery cannot be accurately modeled using the VTA TDM.

In lieu of using a TDM, other data sources and assumptions were used as the basis for estimating the VMT for the hotel. The following sections discuss the VMT analysis techniques for each of the three elements that make up the

VMT for Initial Hotel Guest Trips

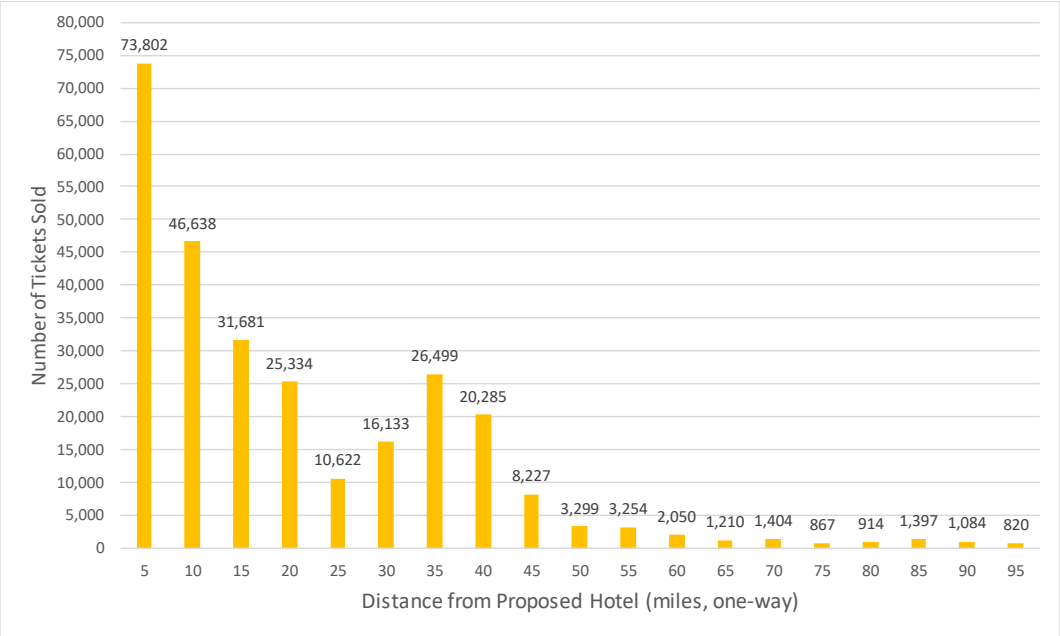
Hotel guest trips were divided into two categories: (1) the initial trip to the hotel (assumed to be from their home); and (2) trips back and forth from the hotel related to their stay. To determine the VMT related the initial trip to the hotel (from the guest's home), ZIP code information for ticket sales for recent on-site concerts was used as a proxy. Ticket sale data by ZIP code was obtained for 2017, 2018 and the first half of 2019.

To calculate the average trip length, any ZIP codes with at least one ticket sale was mapped using the Geographical Information System (GIS) functions in the TransCAD software modeling package. TransCAD is the most used travel demand modeling/routing software package used by Metropolitan Planning Organizations (MPOs) in the United States. While this dataset included concert ticket purchases from outside of California, analysis was limited to California based origins given that these locations were both small in number and did not reveal a consistent pattern. Once mapped, the ZIP codes were converted to centroid points based on their polygon boundaries to

allow for routing along the street network and better estimate the distance to the hotel. Subsequently, the resulting dataset was used as the basis for a multi-path analysis utilizing TransCAD to identify logical paths and estimate trip lengths for calculating VMT.

The concert ticket dataset included over 320,000 ticket sales located in almost 1,400 ZIP codes within California were provided to Kimley-Horn. **Figure 17** displays the number of tickets sold within 100-miles of the proposed hotel in 5-mile increments.

Figure 17 – Number of Tickets Sold by Distance from Proposed Hotel (within 100 miles)



Almost 300,000 of the 320,000 tickets sold were located in ZIP codes within 100-miles of the proposed hotel, accounting for over 93-percent of all ticket sales analyzed. To account for individuals that would likely not stay overnight given their proximity to the hotel, it was assumed that 75-percent of the trips within 100 miles would return home after attending the concert and as such, were removed from dataset for the hotel analysis. Removing 75-percent of patrons purchasing tickets within 100-miles from the dataset resulted in the subsequent analysis of the initial trip relying on data for 97,000 tickets.

As shown in

Table 12, when all tickets sold in California are included in the analysis and proximity to the proposed hotel is not considered, the average VMT for the round trip to the proposed hotel is 90.1 vehicle-miles. However, when 75-percent of the tickets sold within 100-miles are removed from the analysis, the average VMT for the round trip to the proposed hotel is 170.7 vehicle-miles.

Table 12 – VMT for Initial Hotel Trip

Method	VMT per Hotel Room (two-way)	
	All Tickets	Tickets with Proximity Reduction (75% w/in 100-miles removed)
Multipath Analysis	90.1	170.7

It is worth noting that this analysis relies on several key assumptions/methodology considerations including:

- Occupancy for vehicles traveling to the Mountain Winery was assumed to be constant across all vehicles
- Ticket sales were evenly distributed spatially across ZIP codes (uneven loading of ZIP codes was not accounted for and would not have been possible without actual addresses, which would have not provided an appropriate level of patron anonymity).
- No consideration of time or congestion was included when routing vehicles from the ZIP code centroid to the Mountain Winery
- All patrons traveling to the Mountain Winery drive and do not use any other mode of travel, regardless of the distance they need to travel
- The hotel is fully booked, and half of the rooms turn over daily

Based on the considerations above it is estimated that the total number of round trips from homes to the proposed hotel would be 300 trips (150 arriving/150 departing) on a given day. Based on a 170.7-mile round trip estimate (85.4 miles one way), the total VMT for the round trips is approximately 25,610 vehicle-miles.

VMT for Hotel Employee Commute VMT

For the purposes of analysis, it was recognized that employee-related VMT would need to be calculated using a method separate from hotel patrons, as using the same method as hotel patrons would significantly overstate their contribution to VMT. For this analysis, 75 employees would serve the hotel over the course of the day (one employee for every four rooms).

The employee contribution to VMT was based on the average trip length for a commute trip in California, which is 23.96 miles round trip (11.98 miles one way), as a location-specific average commute distance was not available. As a result, the total VMT for the 75 employees was estimated to be approximately 1,800 vehicle-miles. It should be noted that a more accurate VMT calculation could be obtained for the employees using the VTA travel demand model, which better accounts for the special distribution of land use in the area.

VMT for Other Hotel Trips

To determine the number of trips associated with the other activities at the proposed hotel, such as local hotel guest trips, visitors, or deliveries, the number of trips related to the initial Hotel Trips and the Employee Trips was deducted from the trip estimate prepared previously for the hotel based on the *Trip Generation Handbook, 10th Edition* published by the Institute of Transportation Engineers (ITE). After reducing that total daily trip generation estimate of 1,431 by 300 initial hotel trips and 150 employee commute trips, there are 981 trips unaccounted for. Based on an aerial review of near-by amenities and services it is believed that these trips would be accommodated by a 20-mile service area with most averaging 10-miles or less. In order to maintain a conservative estimate, a 10-mile estimate was used as the basis for estimating the VMT of the remaining 981 trips, which results in an estimate of 9,810 miles.

Total Hotel VMT

As shown in **Table 13**, the total VMT for the hotel is estimated to be approximately 37,220 vehicle-miles. As shown, the most significant portion of the VMT is estimated to be contributed by the Initial Hotel Patron Trip (trip to and from the patron's home).

Table 13 – Total Vehicle Miles Traveled (VMT) for the Proposed Hotel

VMT Element	Trips	Total VMT	Percentage of Total VMT
VMT for Initial Hotel Patron Trips	300	25,610	69%
VMT for Employee Commute	150	1,800	5%
VMT for Other Hotel Trips	981	9,810	26%
Total	*1,431*	*37,220*	*100%*

VMT Impact of Guests No Longer Staying at Alternative Local Hotels

As described in the introduction to this section, it is reasonable to assume that the proposed hotel will add some additional employment trips related to employees that work directly at the hotel, but the hotel itself is expected to mostly serve existing patrons of the Mountain Winery. Simply, patrons of the proposed hotel are assumed to currently be traveling to the Mountain Winery and are staying at an alternative hotel (further away) if proposed hotel was not constructed. Based on the project description provided, the additional amenities offered by the proposed hotel are assumed to attract patrons who are not currently traveling to the Mountain Winery. Therefore, the analysis has been designed to conservatively estimate that 20-percent of patrons are adding new trips to the regional roadway network.

Table 14 summarizes the number of rooms and distance from the Mountain Winery for the ten closest existing hotels. These hotels contain a total of 995 rooms, over three times the 300 rooms for the proposed hotel.

Table 14 – Existing Hotels in Proximity to the Mountain Winery by Number of Rooms and Distance

Hotel Name	Number of Rooms	Distance (miles, one-way)
Saratoga Oaks Lodge	24	3.0
The Inn at Saratoga	42	3.2
Aloft Cupertino	123	6.7
Cupertino Hotel	128	7.4
Los Gatos Garden Inn	28	7.6
Toll House Hotel	115	7.6
Hotel Los Gatos	72	8.1
Hilton Garden Inn Cupertino	164	8.4
Larkspur Landing Campbell	117	8.5
AC Hotel by Marriott Sunnyvale Cupertino	182	11.9
Average (Weighted by Number of Rooms)		*8.2*

In order to properly adjust the VMT summarized in **Table 13** to account for the considerations described above, the following assumptions were made:

- The average diversion trip for patrons of the Mountain Winery that are currently staying an existing hotel is 8.2 miles. This is the added one-way distance a patron is traveling back and forth from the site today if they are staying overnight and have the Mountain Winery as their principal destination.
- 80-percent of the guests of the proposed hotel are currently staying at an existing hotel in the area.

As 80-percent of hotel patrons are assumed to be traveling to the Mountain Winery rather than another existing hotel, and that they would continue to stay at the alternate local hotel if the proposed hotel is not constructed, the VMT related to their initial trip and the VMT related to staying at another hotel was deducted from the total for the purpose of identifying VMT directly attributable to the hotel (and not the existing Mountain Winery). As an example, a wedding would occur at the Mountain Winery whether or not the proposed hotel was constructed. This 80-percent reduction was applied to both the VMT related to the Initial Hotel Guest Trip and Other Hotel Guest Trip. In addition, 80-percent of patron's Initial Trips (225 of the 300 total trips) were assumed to provide an additional 8.2-mile improvement in VMT due to the fact that the new hotel location is located at their principal destination (the Mountain Winery).

As shown in **Table 15** below, based on these assumptions, the total VMT estimated to be attributable to the hotel (and not the existing Mountain Winery) is approximately 6,910 miles.

Table 15 – New VMT Attributable to the Hotel

VMT Type	VMT
Total Hotel VMT (Table 12)	37,220
80% Reduction of VMT for Initial Hotel Guest Trips	-20,490
80% Reduction of VMT for Other Hotel Trips	-7,850
Additional VMT Reduction for Improvement of Hotel Location	-1,970
Net VMT	6,910

10. TRAFFIC IMPACTS

Significant Impacts

The proposed Project would not cause any significant impacts on either the Project site or the existing roadway network.

The total VMT estimated to be attributable to the hotel (and not the existing Mountain Winery) is approximately 6,910 miles. As of the preparation of this analysis, the City of Saratoga has not yet defined its VMT guidance (SB 743 does not require this be completed until July 1, 2020). As such no threshold or basis for making a VMT based significant transportation impact determination under CEQA exists. Accordingly, the VMT information provided within this document is provided for informational purposes and as the basis for evaluating air quality in a separate analysis.

APPENDIX

A. EXISTING CONDITIONS TRAFFIC COUNTS

B. EXISTING CONDITIONS TRAFFIX OUTPUT SHEETS

C. EXISTING PLUS PROJECT CONDITIONS TRAFFIX OUTPUT SHEETS

D. BACKGROUND CONDITIONS TRAFFIX OUTPUT SHEETS

E. BACKGROUND PLUS PROJECT CONDITIONS TRAFFIX OUTPUT SHEETS

F. CUMULATIVE CONDITIONS TRAFFIX OUTPUT SHEETS

G. CUMULATIVE PLUS PROJECT CONDITIONS TRAFFIX OUTPUT SHEETS

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A. EXISTING CONDITIONS

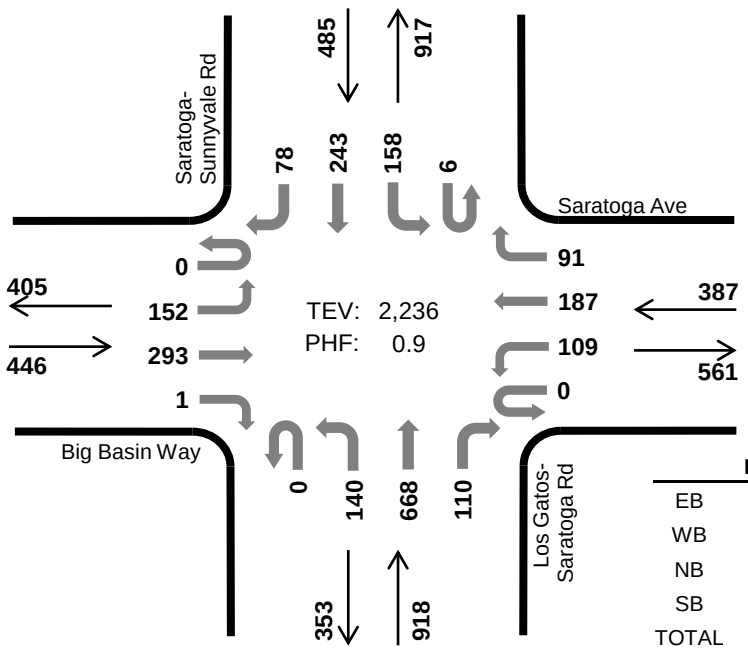
TRAFFIC COUNTS

Los Gatos-Saratoga Rd
Big Basin Way

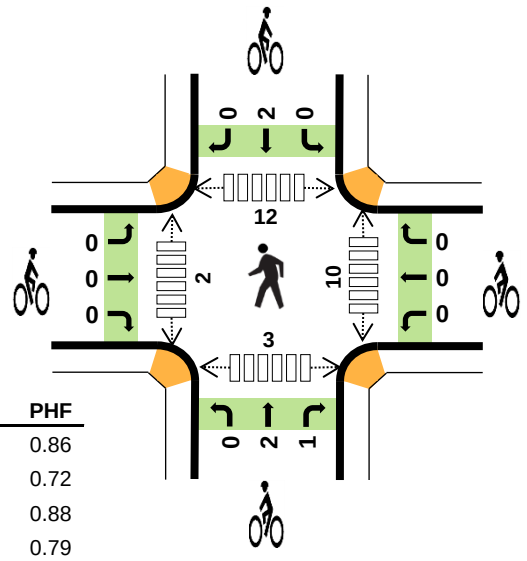
Date: 06-05-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM

N

Peak Hour



	HV %:	PHF
EB	1.3%	0.86
WB	0.8%	0.72
NB	1.6%	0.88
SB	1.0%	0.79
TOTAL	1.3%	0.90



Two-Hour Count Summaries

Interval Start	Big Basin Way				Saratoga Ave				Los Gatos-Saratoga Rd				Saratoga-Sunnyvale Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	12	32	0	0	5	16	9	0	18	177	18	1	13	9	7	317	0
7:15 AM	0	13	50	3	0	7	22	12	0	27	192	15	2	9	15	17	384	0
7:30 AM	0	26	43	1	0	10	13	6	0	27	194	16	0	17	32	9	394	0
7:45 AM	**0**	**33**	**75**	**0**	**0**	**19**	**35**	**17**	**0**	**22**	**215**	**25**	**0**	**48**	**50**	**11**	**550**	1,645
8:00 AM	**0**	**34**	**59**	**0**	**0**	**32**	**52**	**40**	**0**	**30**	**194**	**24**	**0**	**53**	**80**	**21**	**619**	1,947
8:15 AM	**0**	**47**	**82**	**0**	**0**	**42**	**65**	**27**	**0**	**46**	**135**	**28**	**4**	**28**	**58**	**30**	**592**	2,155
8:30 AM	**0**	**38**	**77**	**1**	**0**	**16**	**35**	**7**	**0**	**42**	**124**	**33**	**2**	**29**	**55**	**16**	**475**	**2,236**
8:45 AM	0	28	59	2	0	14	29	11	0	44	161	23	4	23	50	19	467	2,153
Count Total	0	231	477	7	0	145	267	129	0	256	1,392	182	13	220	349	130	3,798	0
Peak Hour All	**0**	**152**	**293**	**1**	**0**	**109**	**187**	**91**	**0**	**140**	**668**	**110**	**6**	**158**	**243**	**78**	**2,236**	**0**
Peak Hour HV	**0**	**3**	**2**	**1**	**0**	**1**	**0**	**2**	**0**	**9**	**3**	**3**	**0**	**2**	**3**	**0**	**29**	**0**
Peak Hour HV%	**-**	**2%**	**1%**	**100%**	**-**	**1%**	**0%**	**2%**	**-**	**6%**	**0%**	**3%**	**0%**	**1%**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	2	3	3	*9*	0	1	1	0	*2*	1	0	0	1	*2*
7:15 AM	1	1	0	0	*2*	1	1	0	0	*2*	0	0	0	0	*0*
7:30 AM	1	1	3	2	*7*	1	0	4	0	*5*	0	0	0	2	*2*
7:45 AM	**3**	**0**	**3**	**0**	***6***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**1**	**1**	*3*
8:00 AM	**0**	**2**	**5**	**0**	***7***	**0**	**0**	**1**	**0**	***1***	**1**	**2**	**3**	**0**	*6*
8:15 AM	**0**	**1**	**7**	**3**	***11***	**0**	**0**	**2**	**0**	***2***	**8**	**0**	**5**	**2**	*15*
8:30 AM	**3**	**0**	**0**	**2**	***5***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**3**	**0**	***3***
8:45 AM	2	1	1	1	*5*	2	0	2	0	*4*	3	1	2	6	*12*
Count Total	11	8	22	11	*52*	4	2	10	2	*18*	14	3	14	12	*43*
Peak Hour	**6**	**3**	**15**	**5**	***29***	**0**	**0**	**3**	**2**	***5***	**10**	**2**	**12**	**3**	***27***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Big Basin Way				Saratoga Ave				Los Gatos-Saratoga Rd				Saratoga-Sunnyvale Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	1	1	0	0	2	1	1	0	1	1	9	0
7:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
7:30 AM	0	0	0	1	0	1	0	0	0	2	0	1	0	1	1	0	7	0
7:45 AM	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**6**	24
8:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**2**	**1**	**2**	**0**	**0**	**0**	**0**	**7**	22
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**1**	**1**	**0**	**1**	**2**	**0**	**11**	31
8:30 AM	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**5**	**29**
8:45 AM	0	1	0	1	0	0	1	0	0	0	1	0	0	0	1	0	5	28
Count Total	0	4	4	3	0	2	3	3	0	11	6	5	1	3	6	1	52	0
Peak Hour	**0**	**3**	**2**	**1**	**0**	**1**	**0**	**2**	**0**	**9**	**3**	**3**	**0**	**2**	**3**	**0**	**29**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Big Basin Way			Saratoga Ave			Los Gatos-Saratoga Rd			Saratoga-Sunnyvale Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	1	0	0	0	0	2	0
7:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	2	0
7:30 AM	0	1	0	0	0	0	0	4	0	0	0	0	5	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	10
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	9
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	9
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**5**
8:45 AM	0	2	0	0	0	0	0	2	0	0	0	0	4	8
Count Total	1	3	0	2	0	0	0	9	1	0	2	0	18	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**2**	**0**	**5**	**0**

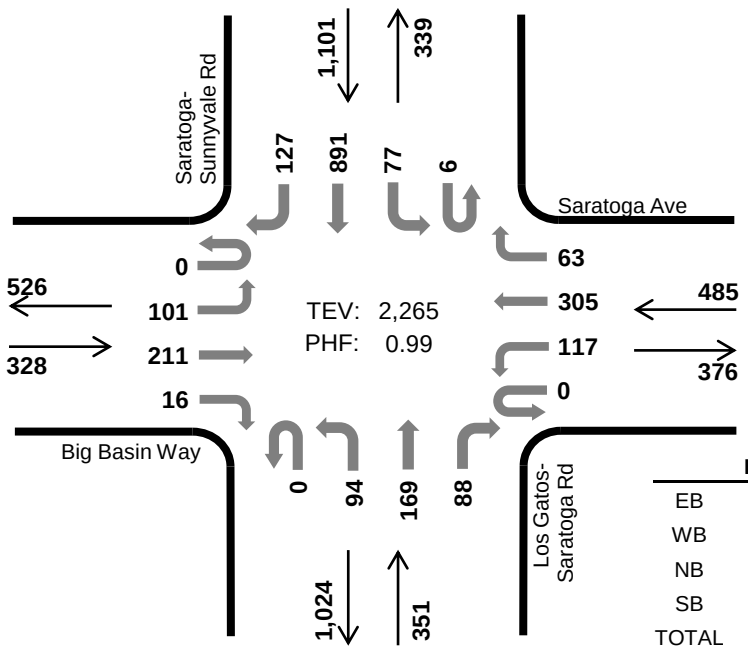
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Los Gatos-Saratoga Rd
Big Basin Way

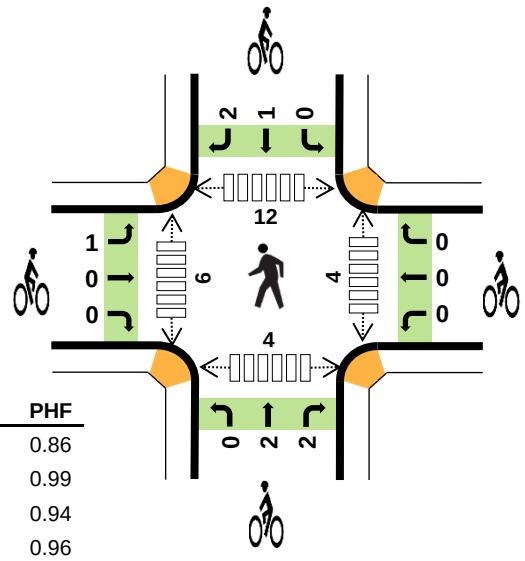
Date: 06-05-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	1.5%	0.86
WB	1.0%	0.99
NB	0.3%	0.94
SB	0.3%	0.96
TOTAL	0.6%	0.99



Two-Hour Count Summaries

Interval Start	Big Basin Way				Saratoga Ave				Los Gatos-Saratoga Rd				Saratoga-Sunnyvale Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	31	49	0	0	25	62	12	0	18	40	14	4	24	161	28	468	0
4:15 PM	0	24	55	2	0	30	64	21	0	25	31	22	0	15	177	31	497	0
4:30 PM	0	25	59	5	0	29	71	7	0	27	36	19	3	21	186	18	506	0
4:45 PM	**0**	**28**	**51**	**6**	**0**	**27**	**77**	**15**	**0**	**22**	**41**	**23**	**0**	**23**	**220**	**36**	**569**	2,040
5:00 PM	**0**	**38**	**53**	**4**	**0**	**32**	**75**	**16**	**0**	**23**	**53**	**17**	**4**	**16**	**211**	**20**	**562**	2,134
5:15 PM	**0**	**18**	**56**	**3**	**0**	**26**	**83**	**14**	**0**	**26**	**39**	**21**	**2**	**20**	**224**	**42**	**574**	2,211
5:30 PM	**0**	**17**	**51**	**3**	**0**	**32**	**70**	**18**	**0**	**23**	**36**	**27**	**0**	**18**	**236**	**29**	**560**	**2,265**
5:45 PM	0	27	48	5	0	42	92	13	0	26	31	12	1	13	234	19	563	2,259
Count Total	0	208	422	28	0	243	594	116	0	190	307	155	14	150	1,649	223	4,299	0
Peak Hour All	**0**	**101**	**211**	**16**	**0**	**117**	**305**	**63**	**0**	**94**	**169**	**88**	**6**	**77**	**891**	**127**	**2,265**	**0**
Peak Hour HV	**0**	**3**	**2**	**0**	**0**	**2**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**2**	**0**	**14**	**0**
Peak Hour HV%	**-**	**3%**	**1%**	**0%**	**-**	**2%**	**1%**	**2%**	**-**	**1%**	**0%**	**0%**	**0%**	**1%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	1	1	1	*5*	0	0	0	0	*0*	2	0	2	2	*6*
4:15 PM	0	1	0	1	*2*	0	2	1	0	*3*	1	0	1	0	*2*
4:30 PM	0	0	2	0	*2*	0	1	0	0	*1*	1	0	2	0	*3*
4:45 PM	**2**	**1**	**0**	**1**	***4***	**0**	**0**	**0**	**1**	***1***	**3**	**0**	**6**	**0**	*9*
5:00 PM	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**1**	**0**	*1*
5:15 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**2**	**0**	***2***	**0**	**2**	**1**	**1**	*4*
5:30 PM	**1**	**0**	**1**	**2**	***4***	**1**	**0**	**1**	**1**	***3***	**1**	**4**	**4**	**3**	***12***
5:45 PM	1	0	0	0	*1*	0	0	3	3	*6*	0	2	2	0	*4*
Count Total	8	7	4	5	*24*	1	3	8	6	*18*	8	8	19	6	*41*
Peak Hour	**5**	**5**	**1**	**3**	***14***	**1**	**0**	**4**	**3**	***8***	**4**	**6**	**12**	**4**	***26***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Big Basin Way				Saratoga Ave				Los Gatos-Saratoga Rd				Saratoga-Sunnyvale Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	1	0	0	0	1	0	0	1	0	0	0	1	0	0	5	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
4:45 PM	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	13
5:00 PM	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	13
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	12
5:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**14**
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
Count Total	0	4	4	0	0	2	3	2	0	2	2	0	0	2	3	0	24	0
Peak Hour	**0**	**3**	**2**	**0**	**0**	**2**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**2**	**0**	**14**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Big Basin Way			Saratoga Ave			Los Gatos-Saratoga Rd			Saratoga-Sunnyvale Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	2	1	0	0	0	0	0	3	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	5
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**2**	7
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	6
5:30 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**8**
5:45 PM	0	0	0	0	0	0	0	3	0	0	3	0	6	13
Count Total	1	0	0	0	0	3	1	5	2	0	4	2	18	0
Peak Hour	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**2**	**8**	**0**

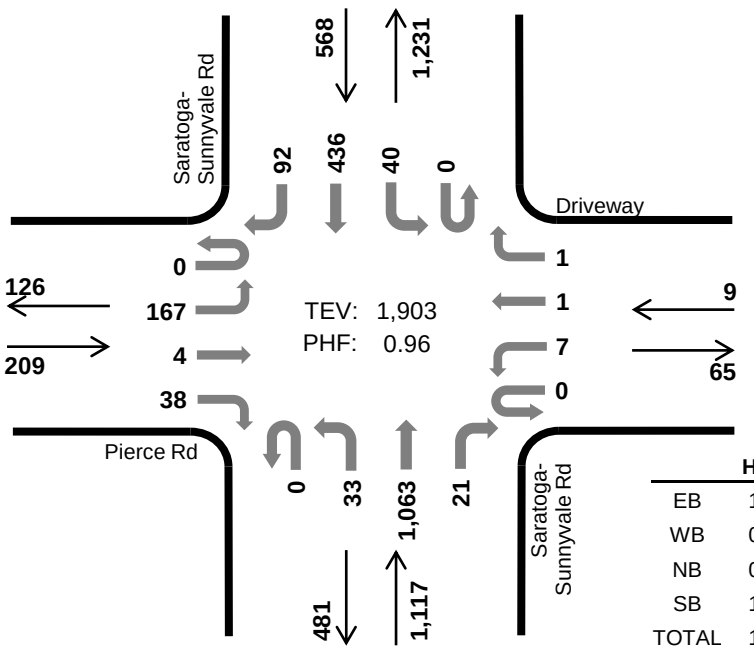
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

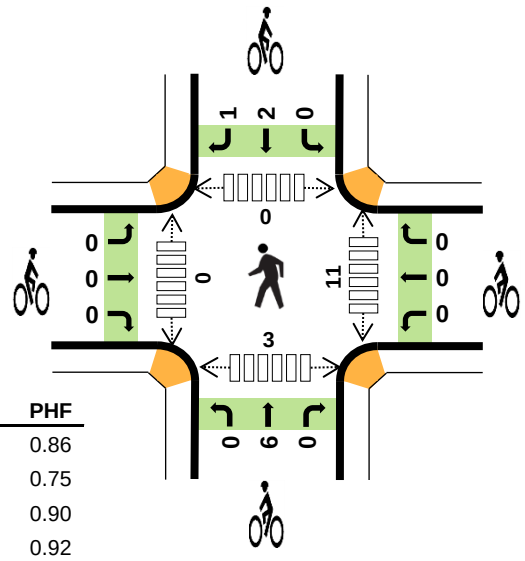
Saratoga-Sunnyvale Rd
Pierce Rd

Date: 06-05-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

N

Peak Hour





	HV %:	PHF
EB	1.0%	0.86
WB	0.0%	0.75
NB	0.8%	0.90
SB	1.8%	0.92
TOTAL	1.1%	0.96

Two-Hour Count Summaries

Interval Start	Pierce Rd				Driveway				Saratoga-Sunnyvale Rd				Saratoga-Sunnyvale Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	27	1	2	0	3	1	0	1	1	218	5	0	4	39	14	316	0
7:15 AM	0	27	2	5	0	0	0	0	0	5	261	5	0	5	50	20	380	0
7:30 AM	0	47	3	9	0	4	1	1	0	5	260	7	0	0	64	7	408	0
7:45 AM	0	49	3	13	0	2	0	0	1	4	251	4	0	9	89	18	443	1,547
8:00 AM	**0**	**46**	**0**	**13**	**0**	**1**	**0**	**1**	**0**	**8**	**301**	**2**	**0**	**7**	**94**	**23**	**496**	1,727
8:15 AM	**0**	**39**	**1**	**14**	**0**	**2**	**0**	**0**	**0**	**7**	**264**	**4**	**0**	**6**	**130**	**18**	**485**	1,832
8:30 AM	**0**	**31**	**2**	**2**	**0**	**1**	**1**	**0**	**0**	**13**	**249**	**8**	**0**	**14**	**98**	**24**	**443**	1,867
8:45 AM	**0**	**51**	**1**	**9**	**0**	**3**	**0**	**0**	**0**	**5**	**249**	**7**	**0**	**13**	**114**	**27**	**479**	**1,903**
Count Total	0	317	13	67	0	16	3	2	2	48	2,053	42	0	58	678	151	3,450	0
Peak Hour All	**0**	**167**	**4**	**38**	**0**	**7**	**1**	**1**	**0**	**33**	**1,063**	**21**	**0**	**40**	**436**	**92**	**1,903**	**0**
Peak Hour HV	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**0**	**0**	**1**	**7**	**2**	**21**	**0**
Peak Hour HV%	**-**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**3%**	**1%**	**0%**	**-**	**3%**	**2%**	**2%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	3	0	*3*	1	0	2	0	*3*	1	0	0	0	*1*
7:15 AM	0	0	0	0	*0*	1	0	0	0	*1*	2	0	0	0	*2*
7:30 AM	0	0	1	3	*4*	0	0	3	3	*6*	4	0	0	0	*4*
7:45 AM	0	0	2	2	*4*	1	0	2	0	*3*	1	0	0	0	*1*
8:00 AM	**0**	**0**	**5**	**2**	***7***	**0**	**0**	**1**	**0**	***1***	**3**	**0**	**0**	**0**	*3*
8:15 AM	**1**	**0**	**0**	**3**	***4***	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**1**	**0**	**2**	**2**	***5***	**0**	**0**	**3**	**1**	***4***	**5**	**0**	**0**	**1**	*6*
8:45 AM	**0**	**0**	**2**	**3**	***5***	**0**	**0**	**0**	**1**	***1***	**3**	**0**	**0**	**2**	***5***
Count Total	2	0	15	15	*32*	3	0	13	6	*22*	19	0	0	3	*22*
Peak Hour	**2**	**0**	**9**	**10**	***21***	**0**	**0**	**6**	**3**	***9***	**11**	**0**	**0**	**3**	***14***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Pierce Rd				Driveway				Saratoga-Sunnyvale Rd				Saratoga-Sunnyvale Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	11
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**1**	**7**	15
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**4**	19
8:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**5**	20
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**1**	**5**	**21**
Count Total	0	2	0	0	0	0	0	0	0	1	14	0	0	1	12	2	32	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**0**	**0**	**1**	**7**	**2**	**21**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Pierce Rd			Driveway			Saratoga-Sunnyvale Rd			Saratoga-Sunnyvale Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	1	0	0	0	0	0	0	2	0	0	0	0	3	0
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	3	0	0	0	3	6	0
7:45 AM	0	0	1	0	0	0	0	2	0	0	0	0	3	13
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	11
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**3**	13
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**4**	11
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**9**
Count Total	2	0	1	0	0	0	0	13	0	0	2	4	22	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**2**	**1**	**9**	**0**

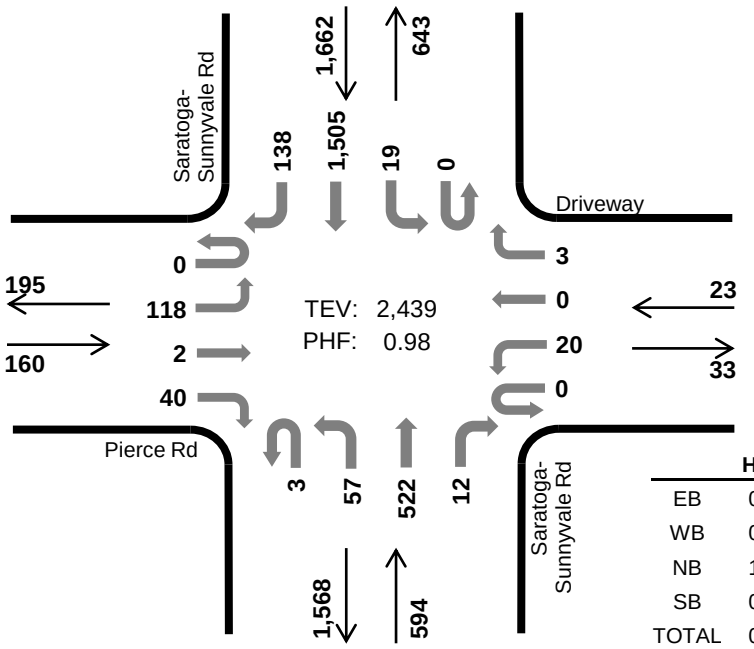
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Saratoga-Sunnyvale Rd
Pierce Rd

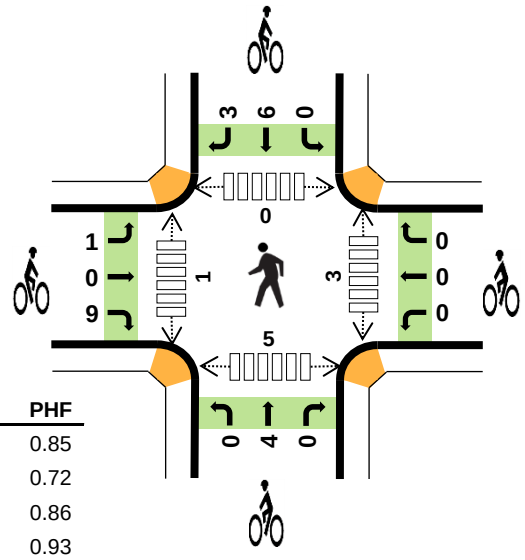
Date: 06-05-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

N

Peak Hour



	HV %:	PHF
EB	0.0%	0.85
WB	0.0%	0.72
NB	1.2%	0.86
SB	0.2%	0.93
TOTAL	0.4%	0.98



Two-Hour Count Summaries

Interval Start	Pierce Rd (Eastbound) UT	LT	TH	RT	Driveway (Westbound) UT	LT	TH	RT	Saratoga-Sunnyvale Rd (Northbound) UT	LT	TH	RT	Saratoga-Sunnyvale Rd (Southbound) UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	24	0	6	0	3	0	0	3	7	134	1	0	6	267	41	492	0
4:15 PM	0	38	3	10	0	3	2	4	0	8	137	2	1	8	292	49	557	0
4:30 PM	0	34	1	14	0	4	2	5	0	9	116	6	1	8	319	35	554	0
4:45 PM	0	31	1	10	0	6	0	0	0	7	125	6	1	8	316	33	544	2,147
5:00 PM	**0**	**22**	**0**	**9**	**0**	**5**	**0**	**0**	**0**	**11**	**160**	**2**	**0**	**5**	**342**	**33**	**589**	2,244
5:15 PM	**0**	**38**	**0**	**9**	**0**	**6**	**0**	**1**	**3**	**14**	**137**	**4**	**0**	**5**	**375**	**32**	**624**	2,311
5:30 PM	**0**	**31**	**2**	**9**	**0**	**6**	**0**	**2**	**0**	**16**	**125**	**2**	**0**	**5**	**383**	**37**	**618**	2,375
5:45 PM	**0**	**27**	**0**	**13**	**0**	**3**	**0**	**0**	**0**	**16**	**100**	**4**	**0**	**4**	**405**	**36**	**608**	**2,439**
Count Total	0	245	7	80	0	36	4	12	6	88	1,034	27	3	49	2,699	296	4,586	0
Peak Hour All	**0**	**118**	**2**	**40**	**0**	**20**	**0**	**3**	**3**	**57**	**522**	**12**	**0**	**19**	**1,505**	**138**	**2,439**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**3**	**0**	**10**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	1	1	*2*	0	0	0	0	*0*	1	2	0	1	*4*
4:15 PM	0	0	1	2	*3*	0	0	3	0	*3*	1	0	0	1	*2*
4:30 PM	0	0	2	1	*3*	0	0	1	1	*2*	1	0	0	0	*1*
4:45 PM	2	0	3	1	*6*	0	0	1	0	*1*	1	0	0	1	*2*
5:00 PM	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**2**	*2*
5:15 PM	**0**	**0**	**2**	**1**	***3***	**8**	**0**	**0**	**3**	***11***	**2**	**0**	**0**	**1**	*3*
5:30 PM	**0**	**0**	**3**	**1**	***4***	**0**	**0**	**0**	**1**	***1***	**1**	**1**	**0**	**2**	*4*
5:45 PM	**0**	**0**	**0**	**1**	***1***	**2**	**0**	**4**	**2**	***8***	**0**	**0**	**0**	**0**	***0***
Count Total	2	0	14	8	*24*	10	0	9	10	*29*	7	3	0	8	*18*
Peak Hour	**0**	**0**	**7**	**3**	***10***	**10**	**0**	**4**	**9**	***23***	**3**	**1**	**0**	**5**	***9***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Pierce Rd				Driveway				Saratoga-Sunnyvale Rd				Saratoga-Sunnyvale Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
4:45 PM	0	2	0	0	0	0	0	0	0	0	3	0	0	0	1	0	6	14
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	14
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	14
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**4**	15
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**10**
Count Total	0	2	0	0	0	0	0	0	0	0	14	0	0	0	8	0	24	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**3**	**0**	**10**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Pierce Rd			Driveway			Saratoga-Sunnyvale Rd			Saratoga-Sunnyvale Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	3	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	2	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	6
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**3**	9
5:15 PM	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**11**	17
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	16
5:45 PM	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**2**	**0**	**8**	**23**
Count Total	1	0	9	0	0	0	0	9	0	0	7	3	29	0
Peak Hour	**1**	**0**	**9**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**6**	**3**	**23**	**0**

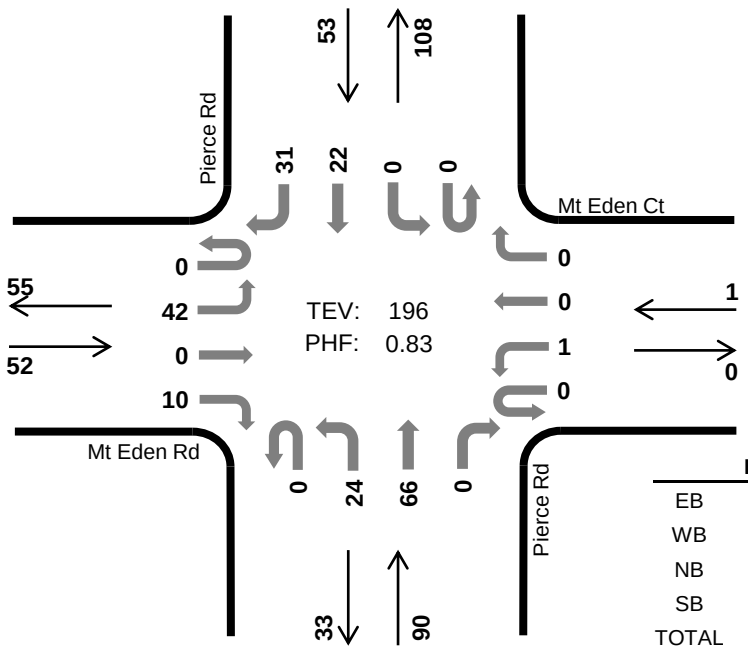
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Pierce Rd
Mt Eden Rd

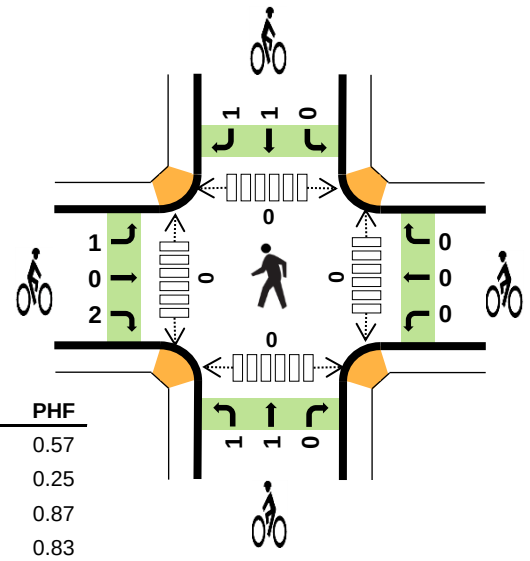
Date: 06-05-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM

N

Peak Hour



	HV %:	PHF
EB	1.9%	0.57
WB	0.0%	0.25
NB	2.2%	0.87
SB	0.0%	0.83
TOTAL	1.5%	0.83



Two-Hour Count Summaries

Interval Start	Mt Eden Rd Eastbound UT	LT	TH	RT	Mt Eden Ct Westbound UT	LT	TH	RT	Pierce Rd Northbound UT	LT	TH	RT	Pierce Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	3	0	0	0	0	0	0	0	3	12	0	0	0	3	4	25	0
7:15 AM	0	7	0	0	0	0	0	0	0	0	13	0	0	0	0	9	29	0
7:30 AM	0	10	0	1	0	0	0	0	0	4	22	0	0	0	2	2	41	0
7:45 AM	**0**	**20**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**20**	**0**	**0**	**0**	**5**	**9**	**59**	154
8:00 AM	**0**	**9**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**6**	**13**	**0**	**0**	**0**	**5**	**7**	**43**	172
8:15 AM	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**6**	**17**	**0**	**0**	**0**	**4**	**7**	**38**	181
8:30 AM	**0**	**13**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**10**	**16**	**0**	**0**	**0**	**8**	**8**	**56**	**196**
8:45 AM	0	9	0	2	0	0	0	1	0	3	13	0	0	1	10	11	50	187
Count Total	0	71	0	13	0	1	0	1	0	34	126	0	0	1	37	57	341	0
Peak Hour All	**0**	**42**	**0**	**10**	**0**	**1**	**0**	**0**	**0**	**24**	**66**	**0**	**0**	**0**	**22**	**31**	**196**	**0**
Peak Hour HV	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**10%**	**-**	**0%**	**-**	**-**	**-**	**4%**	**2%**	**-**	**-**	**-**	**0%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	1	0	0	1	*2*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	0	0	0	2	*2*	0	0	0	0	*0*
7:45 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**0**	**1**	**0**	***1***	**3**	**0**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***
8:45 AM	0	0	0	0	*0*	0	0	1	1	*2*	0	0	0	0	*0*
Count Total	1	0	3	0	*4*	4	0	3	6	*13*	0	0	0	0	*0*
Peak Hour	**1**	**0**	**2**	**0**	***3***	**3**	**0**	**2**	**2**	***7***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Mt Eden Rd				Mt Eden Ct				Pierce Rd				Pierce Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	1	0	0	0	0	0	2	1	0	0	0	0	0	4	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Mt Eden Rd			Mt Eden Ct			Pierce Rd			Pierce Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0	0	0	1	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	2	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	6
8:00 AM	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	9
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**2**	**7**
8:45 AM	0	0	0	0	0	0	1	0	0	0	1	0	2	7
Count Total	2	0	2	0	0	0	2	1	0	0	3	3	13	0
Peak Hour	**1**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**1**	**7**	**0**

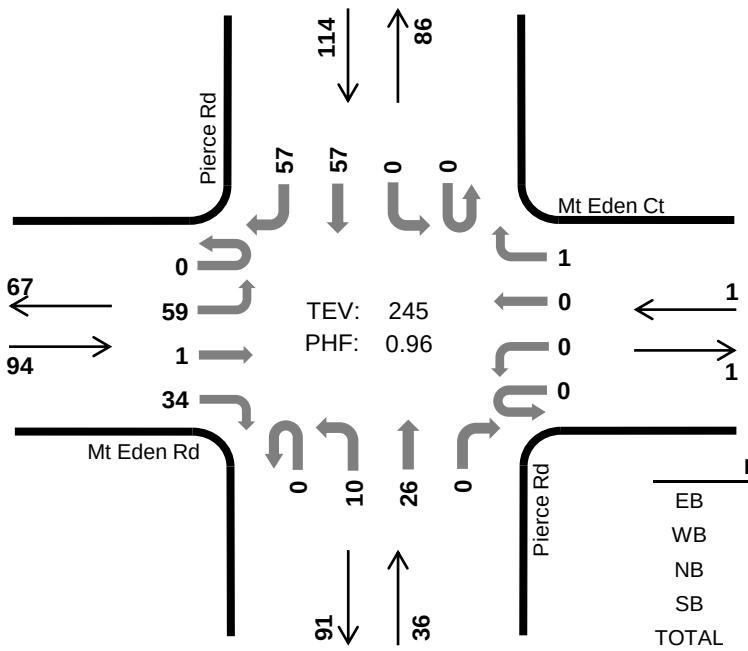
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Pierce Rd
Mt Eden Rd

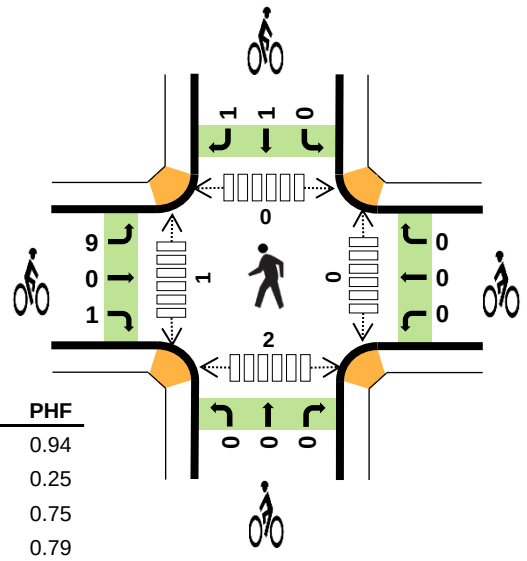
Date: 06-05-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

N

Peak Hour



	HV %:	PHF
EB	1.1%	0.94
WB	0.0%	0.25
NB	0.0%	0.75
SB	0.0%	0.79
TOTAL	0.4%	0.96



Two-Hour Count Summaries

Interval Start	Mt Eden Rd Eastbound UT	LT	TH	RT	Mt Eden Ct Westbound UT	LT	TH	RT	Pierce Rd Northbound UT	LT	TH	RT	Pierce Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	20	0	5	0	0	0	0	0	1	3	0	0	0	12	15	56	0
4:15 PM	0	15	0	6	0	0	1	0	0	2	8	2	0	0	11	12	57	0
4:30 PM	**0**	**18**	**0**	**7**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	**0**	**0**	**0**	**8**	**14**	**56**	0
4:45 PM	**0**	**14**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**22**	**14**	**64**	233
5:00 PM	**0**	**13**	**1**	**10**	**0**	**0**	**0**	**0**	**0**	**3**	**9**	**0**	**0**	**0**	**16**	**11**	**63**	240
5:15 PM	**0**	**14**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**4**	**7**	**0**	**0**	**0**	**11**	**18**	**62**	**245**
5:30 PM	0	12	0	8	0	0	0	0	0	2	8	0	0	1	10	10	51	240
5:45 PM	0	19	0	3	0	0	0	1	0	1	6	0	0	0	13	13	56	232
Count Total	0	125	1	56	0	0	1	2	0	16	51	2	0	1	103	107	465	0
Peak Hour All	**0**	**59**	**1**	**34**	**0**	**0**	**0**	**1**	**0**	**10**	**26**	**0**	**0**	**0**	**57**	**57**	**245**	**0**
Peak Hour HV	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
Peak Hour HV%	**-**	**2%**	**0%**	**0%**	**-**	**-**	**-**	**0%**	**-**	**0%**	**0%**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	0	0	*0*
4:15 PM	0	1	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**2**	*3*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**1**	**0**	**0**	**0**	***1***	**8**	**0**	**0**	**2**	***10***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	0	0	0	*0*	1	0	0	1	*2*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	1	1	0	*3*	12	0	0	3	*15*	0	1	0	2	*3*
Peak Hour	**1**	**0**	**0**	**0**	***1***	**10**	**0**	**0**	**2**	***12***	**0**	**1**	**0**	**2**	***3***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Mt Eden Rd				Mt Eden Ct				Pierce Rd				Pierce Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	3	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

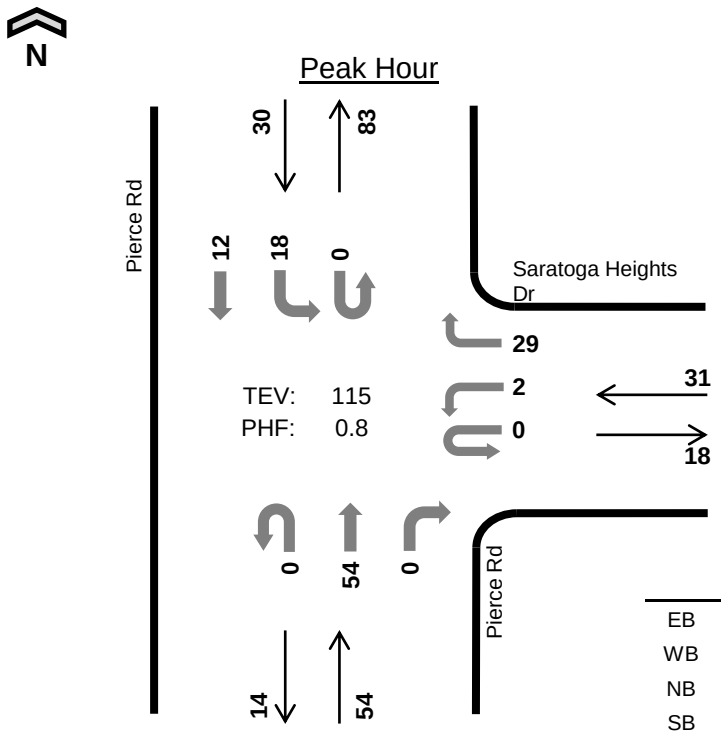
Two-Hour Count Summaries - Bikes

Interval Start	Mt Eden Rd			Mt Eden Ct			Pierce Rd			Pierce Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:15 PM	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**10**	**12**
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	1	2	13
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Count Total	9	0	3	0	0	0	0	0	0	0	1	2	15	0
Peak Hour	**9**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**12**	**0**

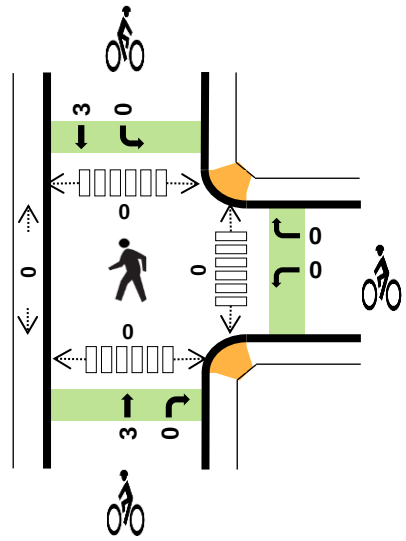
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Pierce Rd
Saratoga Heights Dr

Date: 06-05-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	-	-
WB	0.0%	0.60
NB	3.7%	0.79
SB	3.3%	0.68
TOTAL	2.6%	0.80



Two-Hour Count Summaries

Interval Start	n/a				Saratoga Heights Dr				Pierce Rd				Pierce Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	2	0	0	10	0	0	1	1	0	14	0
7:15 AM	0	0	0	0	0	0	0	2	0	0	10	0	0	0	1	0	13	0
7:30 AM	0	0	0	0	0	1	0	6	0	0	17	0	0	0	2	0	26	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**17**	**0**	**0**	**6**	**5**	**0**	**32**	85
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**13**	**0**	**0**	**3**	**1**	**0**	**19**	90
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**0**	**13**	**0**	**0**	**8**	**2**	**0**	**36**	113
8:30 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**10**	**0**	**0**	**11**	**0**	**0**	**1**	**4**	**0**	**28**	**115**
8:45 AM	0	0	0	0	0	1	0	5	0	0	11	0	0	3	5	0	25	108
Count Total	0	0	0	0	0	4	0	44	0	0	102	0	0	22	21	0	193	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**29**	**0**	**0**	**54**	**0**	**0**	**18**	**12**	**0**	**115**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**4%**	**-**	**-**	**0%**	**8%**	**-**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	2	2	*4*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	0	0	2	4	*6*	0	0	0	0	*0*
7:45 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**2**	**2**	***4***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	0	0	0	0	*0*	0	0	2	0	*2*	0	0	0	0	*0*
Count Total	0	1	2	1	*4*	0	0	9	9	*18*	0	0	0	0	*0*
Peak Hr	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**3**	**3**	***6***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				Saratoga Heights Dr				Pierce Rd				Pierce Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	3
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	0	0	0	1	0	0	2	0	0	0	1	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	**0**

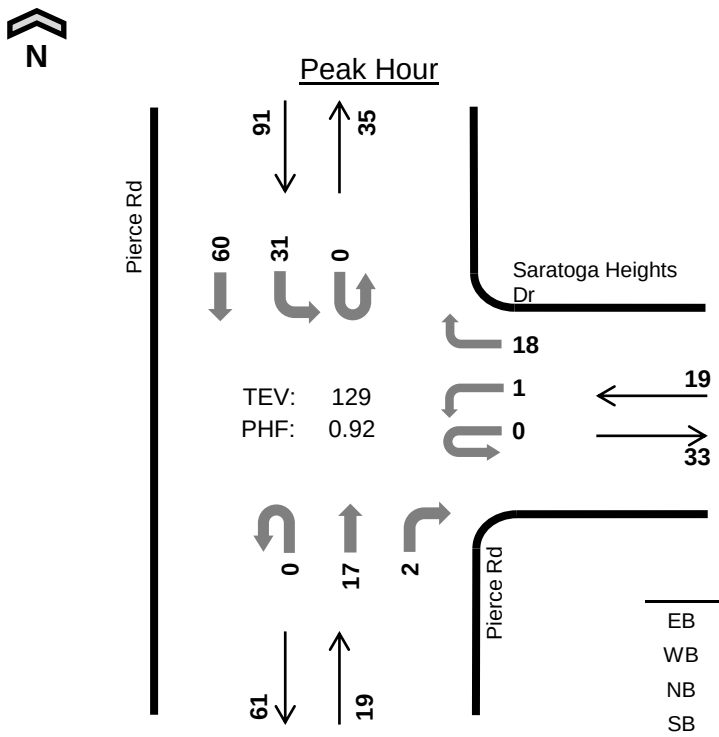
Two-Hour Count Summaries - Bikes

Interval Start	n/a			Saratoga Heights Dr			Pierce Rd			Pierce Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2	0	0	2	0	4	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	4	0	6	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	12
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	12
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**4**	12
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	6
Count Total	0	0	0	0	0	0	0	9	0	0	9	0	18	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**6**	**0**

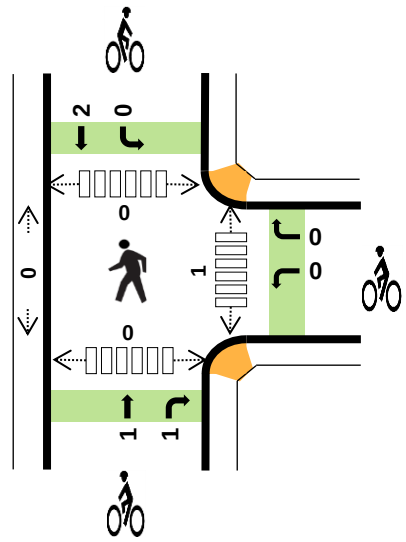
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Pierce Rd
Saratoga Heights Dr

Date: 06-05-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	-	-
WB	0.0%	0.79
NB	0.0%	0.59
SB	0.0%	0.81
TOTAL	0.0%	0.92



Two-Hour Count Summaries

Interval Start		n/a				Saratoga Heights Dr				Pierce Rd				Pierce Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	0	0	3	0	0	1	1	0	5	10	0	20	0
4:15 PM		0	0	0	0	0	0	0	5	0	0	4	0	0	5	11	0	25	0
4:30 PM		0	0	0	0	0	0	0	1	0	0	4	0	0	6	10	0	21	0
4:45 PM		**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**2**	**0**	**0**	**10**	**18**	**0**	**35**	101
5:00 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**3**	**0**	**0**	**8**	**17**	**0**	**33**	114
5:15 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**4**	**2**	**0**	**8**	**12**	**0**	**32**	121
5:30 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**8**	**0**	**0**	**5**	**13**	**0**	**29**	**129**
5:45 PM		0	0	0	0	0	1	0	2	0	0	6	1	0	3	12	0	25	119
Count Total		0	0	0	0	0	2	0	29	0	0	32	4	0	50	103	0	220	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**18**	**0**	**0**	**17**	**2**	**0**	**31**	**60**	**0**	**129**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**0%**	**0%**	**-**	**0%**	**0%**	**-**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	1	1	0	*2*	0	0	0	1	*1*	0	0	0	0	*0*
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	0	0	*0*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	1	1	0	*2*	0	0	2	4	*6*	1	0	0	0	*1*
Peak Hr	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**2**	***4***	**1**	**0**	**0**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

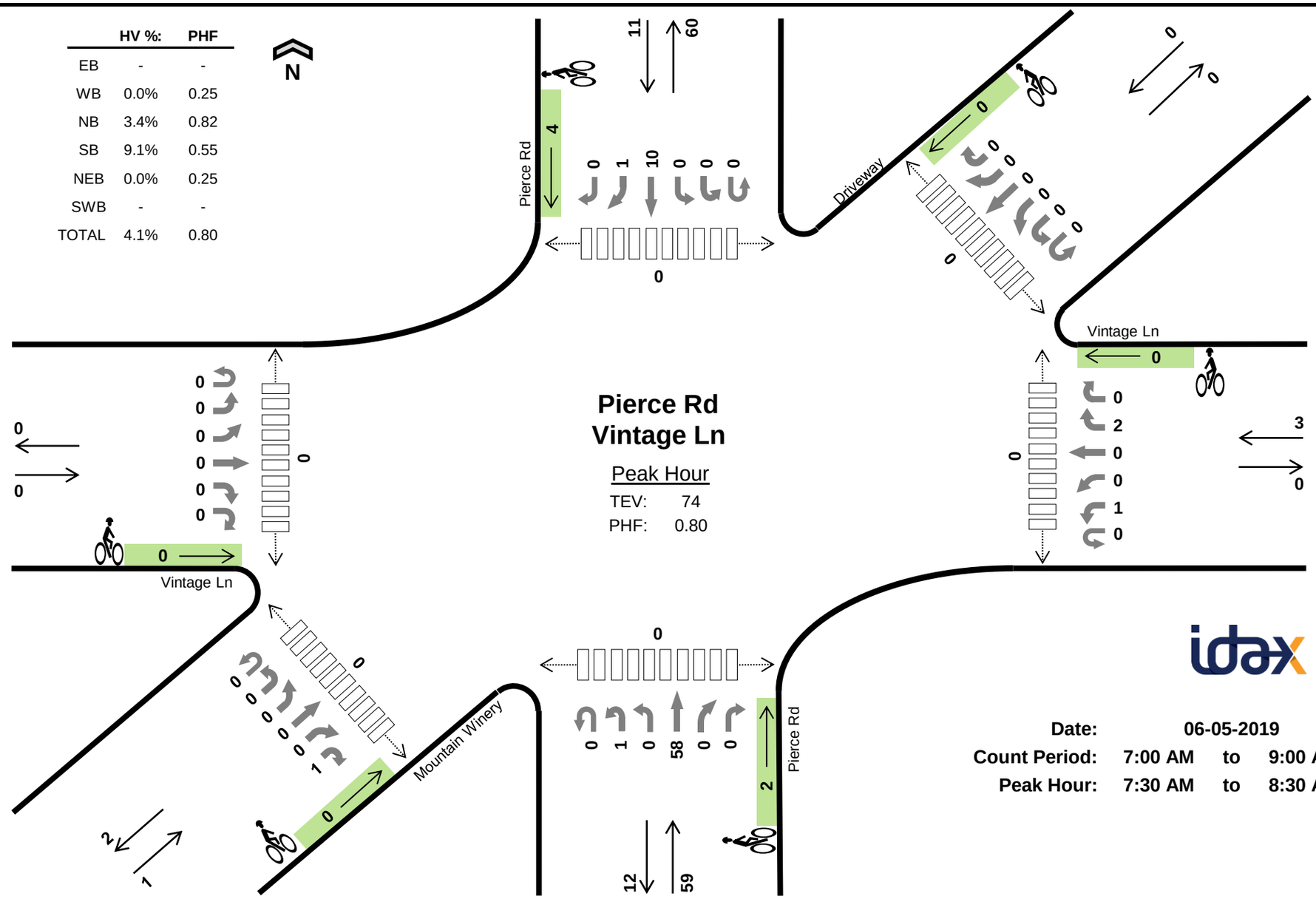
Interval Start	n/a				Saratoga Heights Dr				Pierce Rd				Pierce Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	n/a			Saratoga Heights Dr			Pierce Rd			Pierce Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	2
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**3**	**4**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	0	0	0	0	0	0	1	1	0	4	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**0**	**4**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

	HV %:	PHF
EB	-	-
WB	0.0%	0.25
NB	3.4%	0.82
SB	9.1%	0.55
NEB	0.0%	0.25
SWB	-	-
TOTAL	4.1%	0.80



Date: 06-05-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Two-Hour Count Summaries

Interval Start	Vintage Ln Eastbound						Vintage Ln Westbound						Pierce Rd Northbound						Pierce Rd Southbound						Mountain Winery Northeastbound						Driveway Southwestbound						15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	HR	UT	LT	BL	TH	RT	HR	UT	HL	LT	TH	BR	RT	UT	HL	LT	TH	BR	RT	UT	HL	BL	TH	BR	HR	UT	HL	BL	TH	BR	HR		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	11	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	8	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	69
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	69
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**74**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	12	0	0	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21	74
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	9	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	17	68
Count Total	0	0	0	0	0	0	0	1	0	0	2	0	0	10	0	98	0	0	0	0	1	18	5	0	0	0	0	0	0	1	0	0	0	0	0	1	137	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**58**	**0**	**0**	**0**	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**74**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**0%**	**-**	**-**	**0%**	**-**	**3%**	**-**	**-**	**-**	**-**	**-**	**10%**	**0%**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**-**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals							Bicycles							Pedestrians (Crossing Leg)						
	EB	WB	NB	SB	NEB	SWB	Total	EB	WB	NB	SB	NEB	SWB	Total	East	West	North	South	NE	SW	Total
7:00 AM	0	0	0	0	0	0	*0*	0	0	0	0	0	0	*0*	0	0	0	0	0	0	*0*
7:15 AM	0	0	0	0	0	0	*0*	0	0	0	0	0	0	*0*	0	0	0	0	0	0	*0*
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
8:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
8:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**2**	**2**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
8:30 AM	0	0	1	0	0	0	*1*	0	0	0	0	0	0	*0*	0	0	0	0	0	1	*1*
8:45 AM	0	0	0	0	0	0	*0*	0	0	2	0	0	0	*2*	0	0	0	0	0	0	*0*
Count Total	0	0	3	1	0	0	*4*	0	0	4	4	0	0	*8*	0	0	0	0	0	1	*1*
Peak Hr	**0**	**0**	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**2**	**4**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	**0**	**0**	***0***

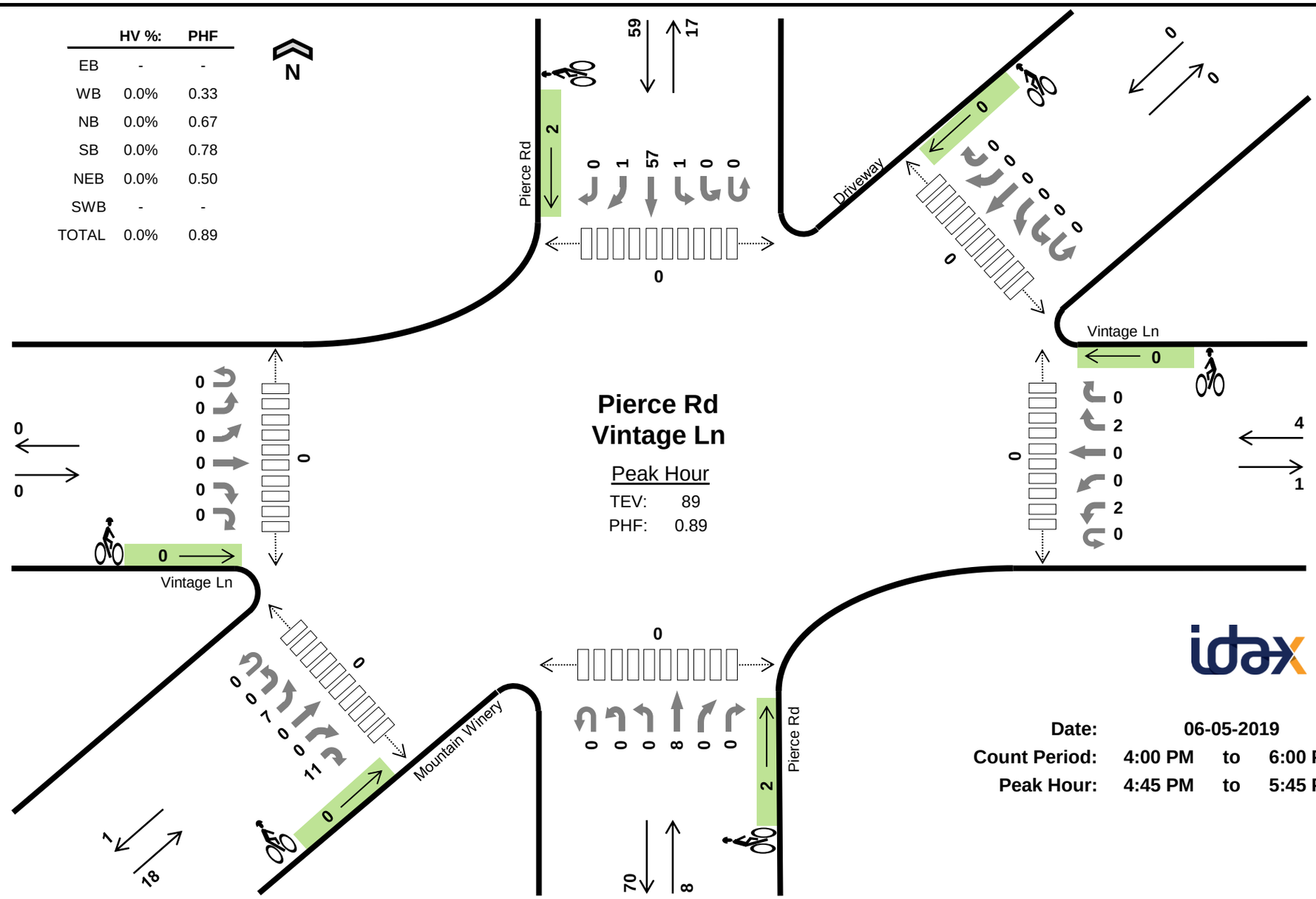
Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Vintage Ln Eastbound						Vintage Ln Westbound						Pierce Rd Northbound						Pierce Rd Southbound						Mountain Winery Northeastbound						Driveway Southwestbound						15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	HR	UT	LT	BL	TH	RT	HR	UT	HL	LT	TH	BR	RT	UT	HL	LT	TH	BR	RT	UT	HL	BL	TH	BR	HR	UT	HL	BL	TH	BR	HR		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Vintage Ln Eastbound						Vintage Ln Westbound						Pierce Rd Northbound						Pierce Rd Southbound						Mountain Winery Northeastbound						Driveway Southwestbound						15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	HR	UT	LT	BL	TH	RT	HR	UT	HL	LT	TH	BR	RT	UT	HL	LT	TH	BR	RT	UT	HL	BL	TH	BR	HR	UT	HL	BL	TH	BR	HR		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**6**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	6	**0**

	HV %:	PHF
EB	-	-
WB	0.0%	0.33
NB	0.0%	0.67
SB	0.0%	0.78
NEB	0.0%	0.50
SWB	-	-
TOTAL	0.0%	0.89



Date: 06-05-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Two-Hour Count Summaries

Interval Start	Vintage Ln Eastbound						Vintage Ln Westbound						Pierce Rd Northbound						Pierce Rd Southbound						Mountain Winery Northeastbound						Driveway Southwestbound						15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	HR	UT	LT	BL	TH	RT	HR	UT	HL	LT	TH	BR	RT	UT	HL	LT	TH	BR	RT	UT	HL	BL	TH	BR	HR	UT	HL	BL	TH	BR	HR		
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	3	0	0	1	0	0	9	0	0	0	0	1	0	0	2	0	0	0	0	0	0	19	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	9	1	0	0	0	0	0	0	1	0	0	0	0	0	0	15	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**17**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	72
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	76
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	79
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**12**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**89**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	13	0	0	0	0	2	0	0	3	0	0	0	0	0	0	22	88
Count Total	0	0	0	0	0	0	0	4	0	0	3	0	0	3	0	19	0	1	1	0	1	99	2	0	0	0	10	0	0	17	0	0	0	0	0	0	160	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**1**	**57**	**1**	**0**	**0**	**0**	**7**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**89**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**0%**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**-**	**-**	**-**	**0%**	**-**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals							Bicycles							Pedestrians (Crossing Leg)						
	EB	WB	NB	SB	NEB	SWB	Total	EB	WB	NB	SB	NEB	SWB	Total	East	West	North	South	NE	SW	Total
4:00 PM	0	0	1	0	1	0	*2*	0	0	0	0	0	0	*0*	0	0	0	0	0	0	*0*
4:15 PM	0	0	0	0	0	0	*0*	0	0	0	1	0	0	*1*	0	0	0	0	0	0	*0*
4:30 PM	0	0	0	0	0	0	*0*	0	0	0	1	0	0	*1*	0	1	0	2	0	1	*4*
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	0	0	0	0	0	*0*	0	0	0	0	0	0	*0*	0	0	0	0	0	0	*0*
Count Total	0	0	1	0	1	0	*2*	0	0	2	4	0	0	*6*	0	1	0	2	0	1	*4*
Peak Hr	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**2**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

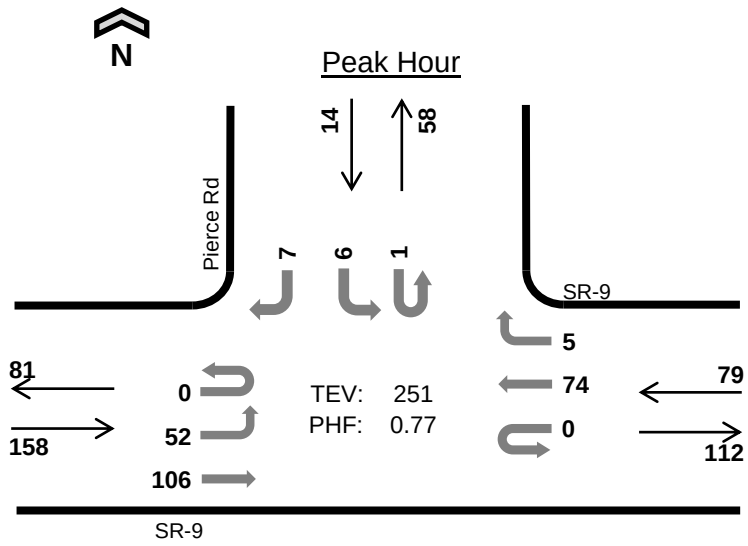
Interval Start	Vintage Ln Eastbound						Vintage Ln Westbound						Pierce Rd Northbound						Pierce Rd Southbound						Mountain Winery Northeastbound						Driveway Southwestbound						15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	HR	UT	LT	BL	TH	RT	HR	UT	HL	LT	TH	BR	RT	UT	HL	LT	TH	BR	RT	UT	HL	BL	TH	BR	HR	UT	HL	BL	TH	BR	HR		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	**0**

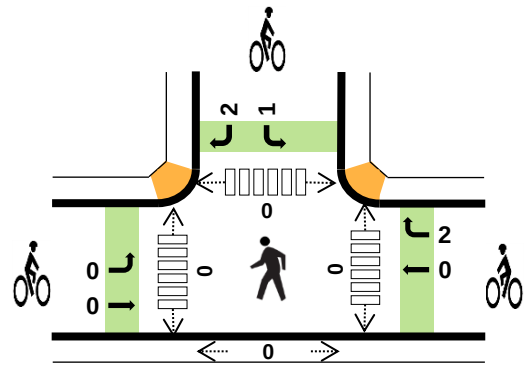
Two-Hour Count Summaries - Bikes

Interval Start	Vintage Ln Eastbound						Vintage Ln Westbound						Pierce Rd Northbound						Pierce Rd Southbound						Mountain Winery Northeastbound						Driveway Southwestbound						15-min Total	Rolling One Hour
	UT	LT	BL	TH	RT	HR	UT	LT	BL	TH	RT	HR	UT	HL	LT	TH	BR	RT	UT	HL	LT	TH	BR	RT	UT	HL	BL	TH	BR	HR	UT	HL	BL	TH	BR	HR		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**4**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4	**0**

Pierce Rd
SR-9

Date: 06-05-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	2.5%	0.77
WB	5.1%	0.79
NB	-	-
SB	7.1%	0.58
TOTAL	3.6%	0.77

Two-Hour Count Summaries

Interval Start	SR-9 Eastbound UT	LT	TH	RT	SR-9 Westbound UT	LT	TH	RT	n/a Northbound UT	LT	TH	RT	Pierce Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	10	19	0	0	0	11	2	0	0	0	0	0	0	0	1	43	0
7:15 AM	0	8	31	0	0	0	9	1	0	0	0	0	0	0	0	1	50	0
7:30 AM	**0**	**15**	**31**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**62**	0
7:45 AM	**0**	**17**	**34**	**0**	**0**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**82**	237
8:00 AM	**0**	**10**	**19**	**0**	**0**	**0**	**19**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**51**	245
8:15 AM	**0**	**10**	**22**	**0**	**0**	**0**	**16**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**2**	**56**	**251**
8:30 AM	0	10	26	0	0	0	18	4	0	0	0	0	0	0	0	2	60	249
8:45 AM	0	8	35	0	1	0	12	4	0	0	0	0	0	2	0	3	65	232
Count Total	0	88	217	0	1	0	124	16	0	0	0	0	1	8	0	14	469	0
Peak Hour All	**0**	**52**	**106**	**0**	**0**	**0**	**74**	**5**	**0**	**0**	**0**	**0**	**1**	**6**	**0**	**7**	**251**	**0**
Peak Hour HV	**0**	**2**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**0**
Peak Hour HV%	**-**	**4%**	**2%**	**-**	**-**	**-**	**5%**	**0%**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**14%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**1**	**1**	**0**	**1**	***3***	**0**	**2**	**0**	**2**	***4***	**0**	**0**	**0**	**0**	***0***
8:30 AM	0	1	0	0	*1*	1	0	0	0	*1*	0	0	0	0	*0*
8:45 AM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	4	5	0	1	*10*	1	3	0	3	*7*	0	0	0	0	*0*
Peak Hr	**4**	**4**	**0**	**1**	***9***	**0**	**2**	**0**	**3**	***5***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SR-9				SR-9				n/a				Pierce Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	4
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	6
8:15 AM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**9**
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	9
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Count Total	0	2	2	0	0	0	4	1	0	0	0	0	0	0	0	1	10	0
Peak Hour	**0**	**2**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**0**

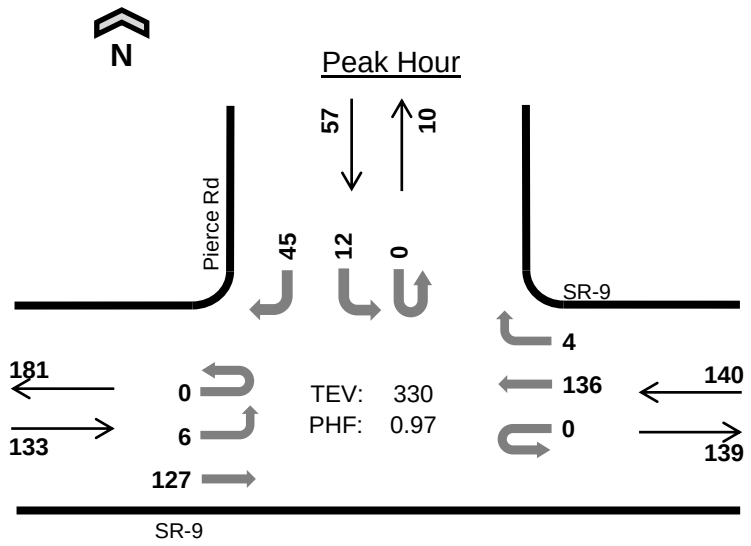
Two-Hour Count Summaries - Bikes

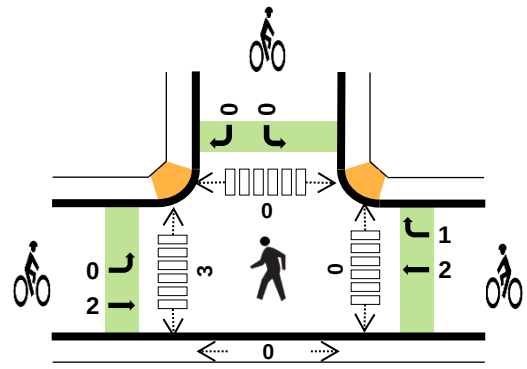
Interval Start	SR-9			SR-9			n/a			Pierce Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**4**	**5**
8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	6
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	6
Count Total	1	0	0	0	0	3	0	0	0	1	0	2	7	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**2**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Pierce Rd
SR-9

Date: 06-05-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.8%	0.90
WB	0.0%	0.95
NB	-	-
SB	0.0%	0.65
TOTAL	0.3%	0.97

Two-Hour Count Summaries

Interval Start	SR-9 Eastbound UT	LT	TH	RT	SR-9 Westbound UT	LT	TH	RT	n/a Northbound UT	LT	TH	RT	Pierce Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	2	18	0	0	0	32	2	0	0	0	0	0	4	0	9	67	0
4:15 PM	0	1	28	0	0	0	31	3	0	0	0	0	0	1	0	9	73	0
4:30 PM	**0**	**3**	**34**	**0**	**0**	**0**	**31**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**79**	0
4:45 PM	**0**	**0**	**33**	**0**	**0**	**0**	**37**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**10**	**85**	304
5:00 PM	**0**	**1**	**28**	**0**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**19**	**84**	321
5:15 PM	**0**	**2**	**32**	**0**	**0**	**0**	**35**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**7**	**82**	**330**
5:30 PM	0	3	15	0	1	0	41	1	0	0	0	0	0	10	0	8	79	330
5:45 PM	0	4	23	0	0	0	35	0	0	0	0	0	0	7	0	10	79	324
Count Total	0	16	211	0	1	0	275	10	0	0	0	0	0	34	0	81	628	0
Peak Hour All	**0**	**6**	**127**	**0**	**0**	**0**	**136**	**4**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**45**	**330**	**0**
Peak Hour HV	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	0	0	*0*
4:15 PM	0	0	0	0	*0*	1	1	0	0	*2*	1	0	1	0	*2*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**0**	**0**	***3***	**0**	**2**	**0**	**0**	*2*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	*1*
5:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	0	0	0	*0*	1	0	0	2	*3*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	1	0	0	0	*1*	4	6	0	2	*12*	1	3	1	0	*5*
Peak Hr	**1**	**0**	**0**	**0**	***1***	**2**	**3**	**0**	**0**	***5***	**0**	**3**	**0**	**0**	***3***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SR-9				SR-9				n/a				Pierce Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

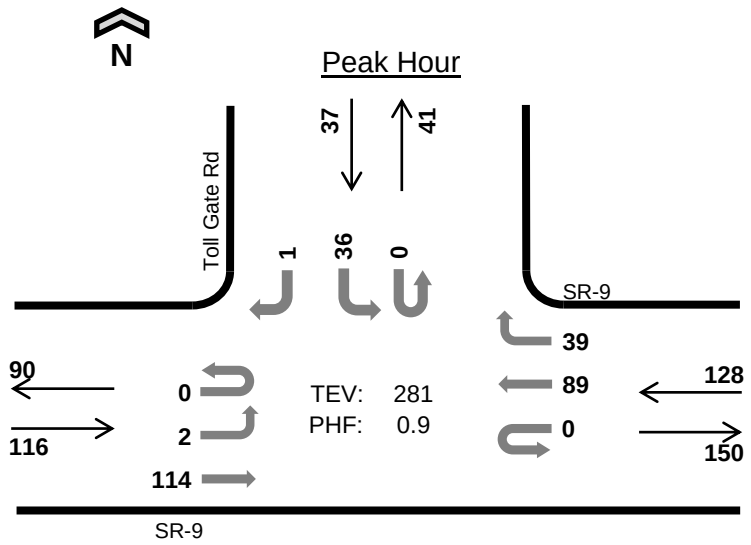
Two-Hour Count Summaries - Bikes

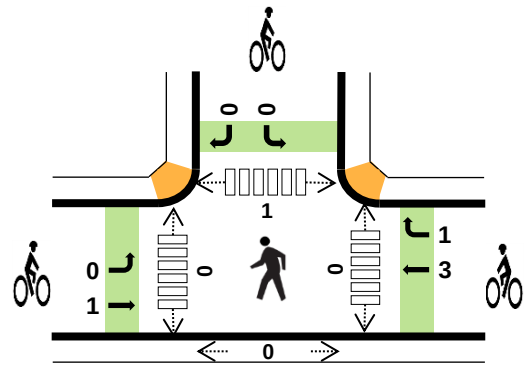
Interval Start	SR-9			SR-9			n/a			Pierce Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	2	0
4:30 PM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	7
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	6
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
5:30 PM	1	0	0	0	0	0	0	0	0	1	0	1	3	5
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	5
Count Total	2	2	0	0	4	2	0	0	0	1	0	1	12	0
Peak Hour	**0**	**2**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Toll Gate Rd
SR-9

Date: 06-05-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	2.6%	0.74
WB	5.5%	0.86
NB	-	-
SB	2.7%	0.62
TOTAL	3.9%	0.90

Two-Hour Count Summaries

Interval Start		SR-9 Eastbound				SR-9 Westbound				n/a Northbound				Toll Gate Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	18	0	0	0	9	2	0	0	0	0	0	2	0	0	31	0
7:15 AM		0	0	32	0	0	0	13	5	0	0	0	0	0	4	0	0	54	0
7:30 AM		0	0	31	0	0	0	21	4	0	0	0	0	0	3	0	0	59	0
7:45 AM		**0**	**1**	**38**	**0**	**0**	**0**	**19**	**6**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**74**	218
8:00 AM		**0**	**0**	**25**	**0**	**0**	**0**	**26**	**6**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**64**	251
8:15 AM		**0**	**1**	**28**	**0**	**0**	**0**	**21**	**13**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**1**	**78**	275
8:30 AM		**0**	**0**	**23**	**0**	**0**	**0**	**23**	**14**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**65**	**281**
8:45 AM		0	2	42	0	0	0	17	6	0	0	0	0	0	3	0	0	70	277
Count Total		0	4	237	0	0	0	149	56	0	0	0	0	0	48	0	1	495	0
Peak Hour	**All**	**0**	**2**	**114**	**0**	**0**	**0**	**89**	**39**	**0**	**0**	**0**	**0**	**0**	**36**	**0**	**1**	**281**	**0**
	HV	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**11**	**0**
	HV%	**-**	**0%**	**3%**	**-**	**-**	**-**	**7%**	**3%**	**-**	**-**	**-**	**-**	**-**	**3%**	**-**	**0%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	3	2	0	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**1**	**1**	**0**	**0**	***2***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**1**	**5**	**0**	**0**	***6***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**1**	**0**	**0**	**1**	***2***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**1**	**0**	***1***
8:45 AM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	7	10	0	1	*18*	1	5	0	0	*6*	0	0	1	0	*1*
Peak Hr	**3**	**7**	**0**	**1**	***11***	**1**	**4**	**0**	**0**	***5***	**0**	**0**	**1**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SR-9				SR-9				n/a				Toll Gate Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	9
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
8:15 AM	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	14
8:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**11**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Count Total	0	0	7	0	0	0	9	1	0	0	0	0	0	1	0	0	18	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**11**	**0**

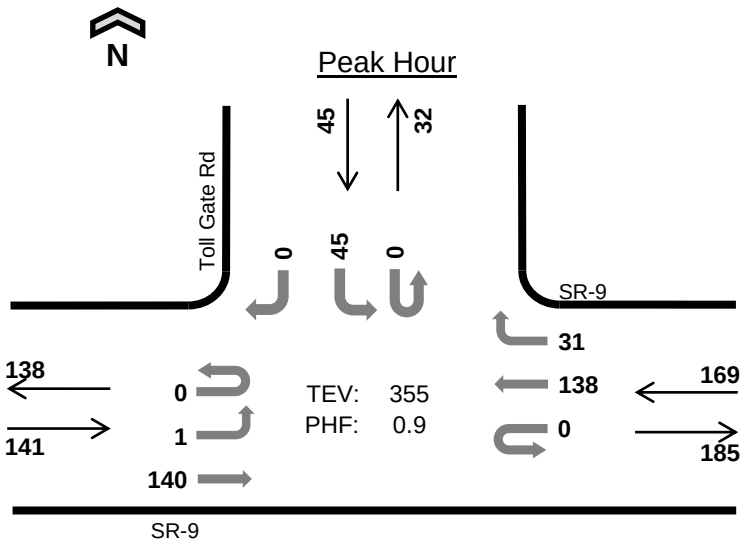
Two-Hour Count Summaries - Bikes

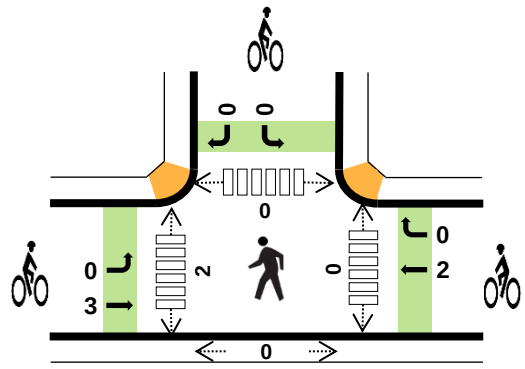
Interval Start	SR-9			SR-9			n/a			Toll Gate Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	3
8:30 AM	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**5**
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	5
Count Total	0	1	0	0	4	1	0	0	0	0	0	0	6	0
Peak Hour	**0**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Toll Gate Rd
SR-9

Date: 06-05-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.7%	0.88
WB	0.0%	0.90
NB	-	-
SB	0.0%	0.80
TOTAL	0.3%	0.90

Two-Hour Count Summaries

Interval Start		SR-9 Eastbound UT	LT	TH	RT	SR-9 Westbound UT	LT	TH	RT	n/a Northbound UT	LT	TH	RT	Toll Gate Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	0	23	0	0	0	30	6	0	0	0	0	0	6	0	0	65	0
4:15 PM		0	0	29	0	1	0	31	5	0	0	0	0	0	11	0	0	77	0
4:30 PM		**0**	**0**	**34**	**0**	**0**	**0**	**30**	**7**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**81**	0
4:45 PM		**0**	**0**	**38**	**0**	**0**	**0**	**37**	**10**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**99**	322
5:00 PM		**0**	**1**	**28**	**0**	**0**	**0**	**33**	**7**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**78**	335
5:15 PM		**0**	**0**	**40**	**0**	**0**	**0**	**38**	**7**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**97**	**355**
5:30 PM		0	0	25	0	0	0	42	6	0	0	0	0	0	3	0	1	77	351
5:45 PM		0	1	32	0	2	0	35	11	0	0	0	0	0	6	0	0	87	339
Count Total		0	2	249	0	3	0	276	59	0	0	0	0	0	71	0	1	661	0
Peak Hour	**All**	**0**	**1**	**140**	**0**	**0**	**0**	**138**	**31**	**0**	**0**	**0**	**0**	**0**	**45**	**0**	**0**	**355**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
	HV%	**-**	**0%**	**1%**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	0	0	*0*
4:15 PM	0	0	0	0	*0*	1	2	0	0	*3*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**3**	**1**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**0**	**2**	**0**	**0**	*2*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	0	0	0	*0*	1	0	0	1	*2*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	1	0	0	0	*1*	6	5	0	1	*12*	0	2	0	0	*2*
Peak Hr	**1**	**0**	**0**	**0**	***1***	**3**	**2**	**0**	**0**	***5***	**0**	**2**	**0**	**0**	***2***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	SR-9				SR-9				n/a				Toll Gate Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	SR-9			SR-9			n/a			Toll Gate Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	1	0	0	2	0	0	0	0	0	0	0	3	0
4:30 PM	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	8
5:00 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
5:30 PM	0	1	0	0	0	0	0	0	0	1	0	0	2	3
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	4
Count Total	0	6	0	0	5	0	0	0	0	1	0	0	12	0
Peak Hour	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

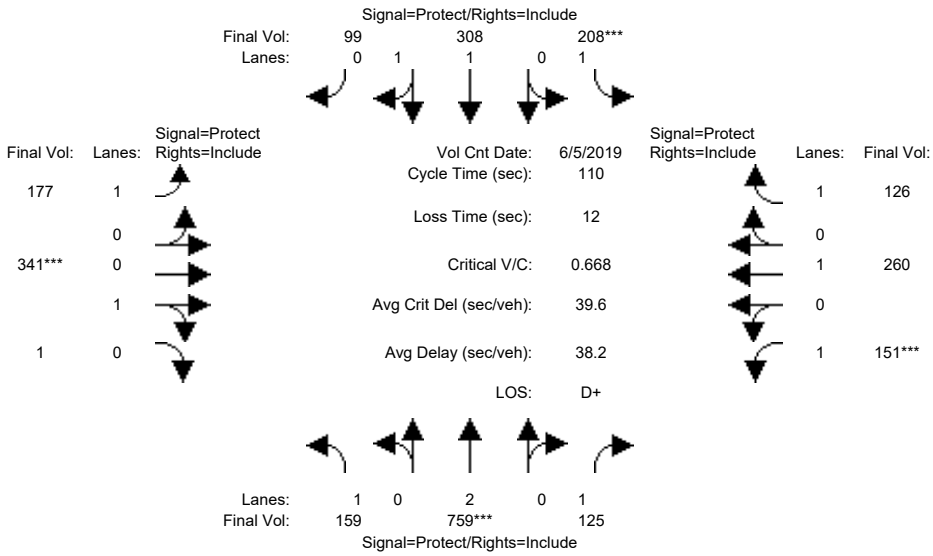
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kimley»Horn

B. EXISTING CONDITIONS TRAFFIX OUTPUT SHEETS

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
AM_EX

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.0	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	140	668	110	164	243	78	152	293	1	109	187	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	668	110	164	243	78	152	293	1	109	187	91
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	668	110	164	243	78	152	293	1	109	187	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.79	0.79	0.79	0.86	0.86	0.86	0.72	0.72	0.72
PHF Volume:	159	759	125	208	308	99	177	341	1	151	260	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	759	125	208	308	99	177	341	1	151	260	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	159	759	125	208	308	99	177	341	1	151	260	126
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.50	0.50	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	2800	899	1750	1794	6	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.07	0.12	0.11	0.11	0.10	0.19	0.19	0.09	0.14	0.07
Crit Moves:		****		****				****		****		
Green Time:	23.8	32.9	32.9	19.5	28.7	28.7	19.4	31.3	31.3	14.3	26.2	26.2
Volume/Cap:	0.42	0.67	0.24	0.67	0.42	0.42	0.57	0.67	0.67	0.67	0.57	0.30
Uniform Del:	37.2	33.8	29.1	42.2	33.7	33.7	41.5	34.8	34.8	45.6	37.0	34.4
IncremntDel:	0.8	1.5	0.2	5.5	0.3	0.3	2.6	3.4	3.4	7.4	1.8	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	38.0	35.3	29.3	47.7	34.0	34.0	44.2	38.1	38.1	53.0	38.8	34.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.0	35.3	29.3	47.7	34.0	34.0	44.2	38.1	38.1	53.0	38.8	34.8
LOS by Move:	D+	D+	C	D	C-	C-	D	D+	D+	D-	D+	C-
HCM2kAvgQ:	132	300	86	179	141	141	166	290	290	163	207	97

Note: Queue reported is the distance per lane in feet.

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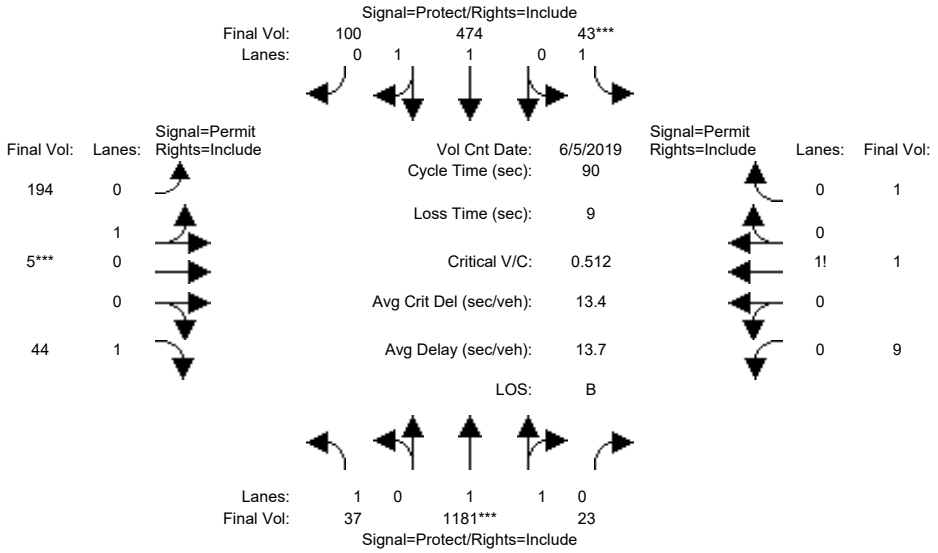
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
AM_EX

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	33	1063	21	40	436	92	167	4	38	7	1	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1063	21	40	436	92	167	4	38	7	1	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1063	21	40	436	92	167	4	38	7	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.92	0.92	0.92	0.86	0.86	0.86	0.75	0.75	0.75
PHF Volume:	37	1181	23	43	474	100	194	5	44	9	1	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	1181	23	43	474	100	194	5	44	9	1	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	1181	23	43	474	100	194	5	44	9	1	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	1.96	0.04	1.00	1.64	0.36	0.98	0.02	1.00	0.78	0.11	0.11
Final Sat.:	1750	3628	72	1750	3055	645	1758	42	1750	1361	194	194
Capacity Analysis Module:												
Vol/Sat:	0.02	0.33	0.33	0.02	0.16	0.16	0.11	0.11	0.03	0.01	0.01	0.01
Crit Moves:		****		****				****				
Green Time:	13.7	57.2	57.2	4.4	47.9	47.9	19.4	19.4	19.4	19.4	19.4	19.4
Volume/Cap:	0.14	0.51	0.51	0.51	0.29	0.29	0.51	0.51	0.12	0.03	0.03	0.03
Uniform Del:	33.0	8.9	8.9	41.8	11.7	11.7	31.1	31.1	28.4	27.9	27.9	27.9
IncremntDel:	0.2	0.2	0.2	5.2	0.1	0.1	1.2	1.2	0.1	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	33.3	9.0	9.0	47.0	11.8	11.8	32.3	32.3	28.5	27.9	27.9	27.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.3	9.0	9.0	47.0	11.8	11.8	32.3	32.3	28.5	27.9	27.9	27.9
LOS by Move:	C-	A	A	D	B+	B+	C-	C-	C	C	C	C
HCM2kAvgQ:	22	223	223	51	112	112	141	141	27	7	7	7

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Note: Queue reported is the distance per lane in feet.

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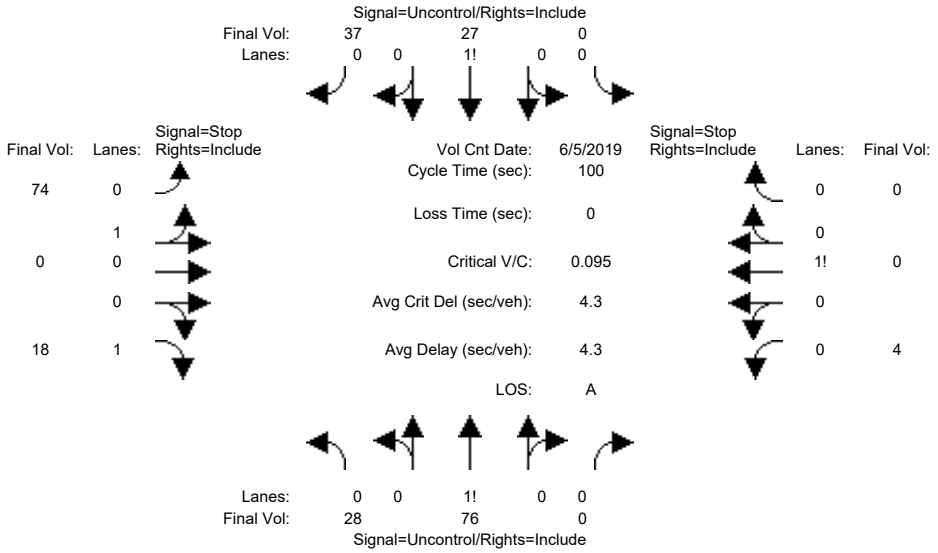
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
AM_EX

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                       Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:      24   66     0     0   22    31    42    0    10     1    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   24   66     0     0   22    31    42    0    10     1    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   24   66     0     0   22    31    42    0    10     1    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.87 0.87  0.87  0.83 0.83  0.83  0.57 0.57  0.57  0.25 0.25  0.25
PHF Volume:    28   76     0     0   27    37    74    0    18     4    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   28   76     0     0   27    37    74    0    18     4    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1 xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   64 xxxx xxxxx  xxxx xxxx xxxxx   176  176    45   185 xxxx xxxxx
Potent Cap.: 1551 xxxx xxxxx  xxxx xxxx xxxxx   786  717  1025   780 xxxx xxxxx
Move Cap.:   1551 xxxx xxxxx  xxxx xxxx xxxxx   775  704  1025   756 xxxx xxxxx
Volume/Cap:  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.10 0.00  0.02  0.01 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.4 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   1.3   0.4 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.6   9.8 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   775 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.1 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx              9.8              9.8
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   24   66     0     0   22    31    42    0    10     1    0     0
ApproachDel:    xxxxxx           xxxxxx              9.8              9.8
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=52]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=196]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=196]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   24   66     0     0   22    31    42    0    10     1    0     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             143
Minor Approach Volume:           52
Minor Approach Volume Threshold: 904
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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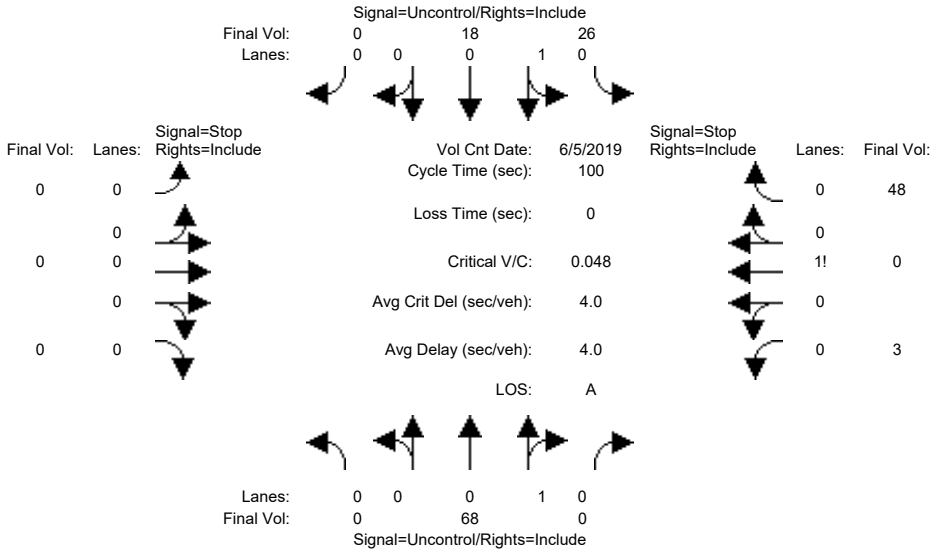
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
AM_EX

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   54     0    18   12     0     0    0     0     2    0    29
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   54     0    18   12     0     0    0     0     2    0    29
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   54     0    18   12     0     0    0     0     2    0    29
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.79 0.79  0.79  0.68 0.68  0.68  1.00 1.00  1.00  0.60 0.60  0.60
PHF Volume:     0   68     0    26   18     0     0    0     0     3    0    48
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   68     0    26   18     0     0    0     0     3    0    48
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    68 xxxx xxxxx  xxxx xxxx xxxxx   139  139    68
Potent Cap.: xxxx xxxx xxxxx  1526 xxxx xxxxx  xxxx xxxx xxxxx   859  756  1000
Move Cap.:   xxxx xxxx xxxxx  1526 xxxx xxxxx  xxxx xxxx xxxxx   847  742  1000
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.05
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.3 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  989 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.2 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.8 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.8
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   54     0    18   12     0     0    0     0     2    0    29
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.8
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=31]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=115]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   54     0    18   12     0     0    0     0     2    0    29
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             84
Minor Approach Volume:           31
Minor Approach Volume Threshold: 880
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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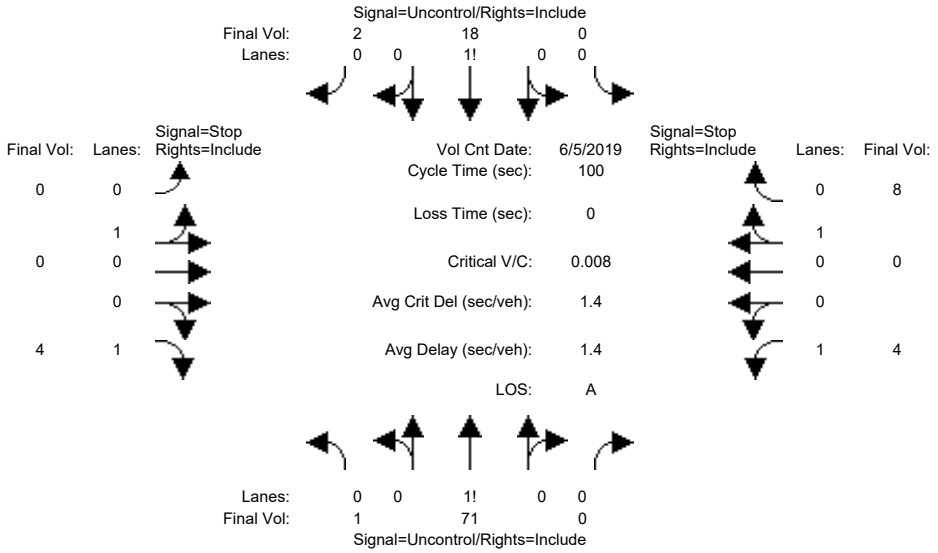
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
AM_EX

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                   Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       1   58     0     0   10     1     0    0     1     1    0     2
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    1   58     0     0   10     1     0    0     1     1    0     2
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    1   58     0     0   10     1     0    0     1     1    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.82 0.82  0.82  0.55 0.55  0.55  0.25 0.25  0.25  0.25 0.25  0.25
PHF Volume:     1   71     0     0   18     2     0    0     4     4    0     8
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    1   71     0     0   18     2     0    0     4     4    0     8
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   20 xxxx xxxxx  xxxx xxxx xxxxx    96   92    19    94   93    71
Potent Cap.: 1590 xxxx xxxxx  xxxx xxxx xxxxx   891  802  1065   894  801   997
Move Cap.:   1590 xxxx xxxxx  xxxx xxxx xxxxx   883  801  1065   890  800   997
Volume/Cap:  0.00 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.00  0.00 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.1 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3   0.3 xxxx xxxxx
Control Del:  7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.4   9.1 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx     0 xxxx xxxxx  xxxx xxxx   997
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:  7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.6
Shared LOS:     A    *     *     *    *     *     *    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx               8.4               8.8
ApproachLOS:         *                *                 A                 A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    1   58     0     0   10     1     0    0     1     1    0     2
ApproachDel:    xxxxxx           xxxxxx              8.4              8.8
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=74]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=3]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=74]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    1   58     0     0   10     1     0    0     1     1    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             70
Minor Approach Volume:           3
Minor Approach Volume Threshold: 1129
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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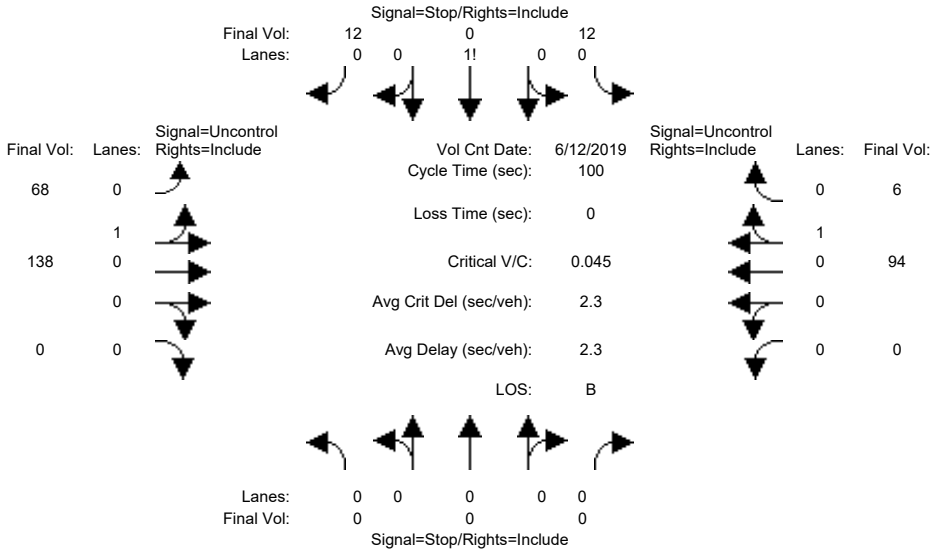
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
AM_EX

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0     7    0     7    52  106     0     0   74     5
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     7    0     7    52  106     0     0   74     5
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     7    0     7    52  106     0     0   74     5
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.58 0.58  0.58  0.77 0.77  0.77  0.79 0.79  0.79
PHF Volume:     0    0     0    12    0    12    68  138     0     0   94     6
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    12    0    12    68  138     0     0   94     6
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.5  6.6   6.3   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.6  4.1   3.4   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   370  370    97   100 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   621  552   946  1486 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   599  526   946  1486 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.02 0.00  0.01  0.05 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   3.6 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  733 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.1 xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 10.1 xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             10.1           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0     7    0     7    52  106     0     0   74     5
ApproachDel:    xxxxxx             10.1           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=14]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=251]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0     7    0     7    52  106     0     0   74     5
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             237
Minor Approach Volume:           14
Minor Approach Volume Threshold: 603
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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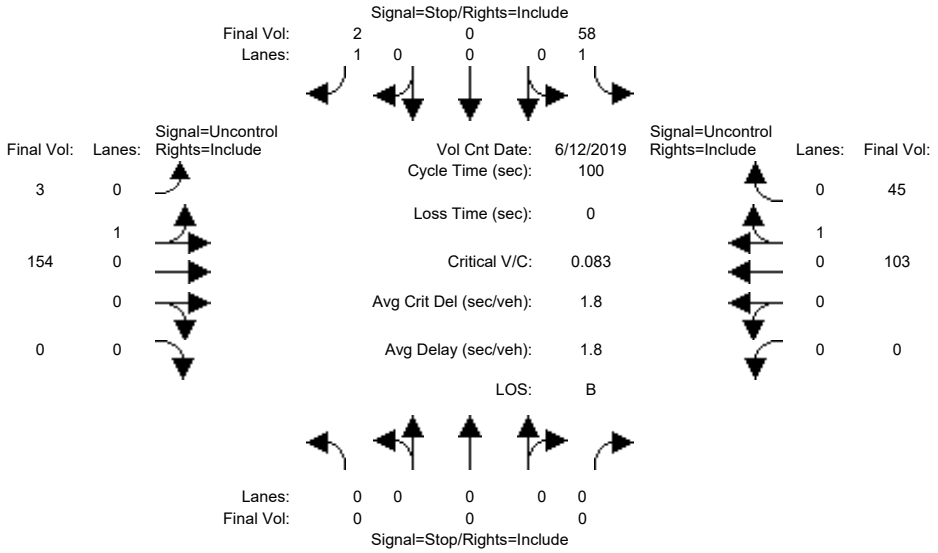
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
AM_EX

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0    36    0     1     2  114     0     0   89    39
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    36    0     1     2  114     0     0   89    39
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    36    0     1     2  114     0     0   89    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.62 0.62  0.62  0.74 0.74  0.74  0.86 0.86  0.86
PHF Volume:     0    0     0    58    0     2     3  154     0     0  103    45
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    58    0     2     3  154     0     0  103    45
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   286 xxxx   126   149 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   703 xxxx   922  1426 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   702 xxxx   922  1426 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.08 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   6.7 xxxx   0.1   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  10.6 xxxx   8.9   7.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     A     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             10.5           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    36    0     1     2  114     0     0   89    39
ApproachDel:    xxxxxx             10.5           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=37]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=281]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    36    0     1     2  114     0     0   89    39
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             244
Minor Approach Volume:           37
Minor Approach Volume Threshold: 736
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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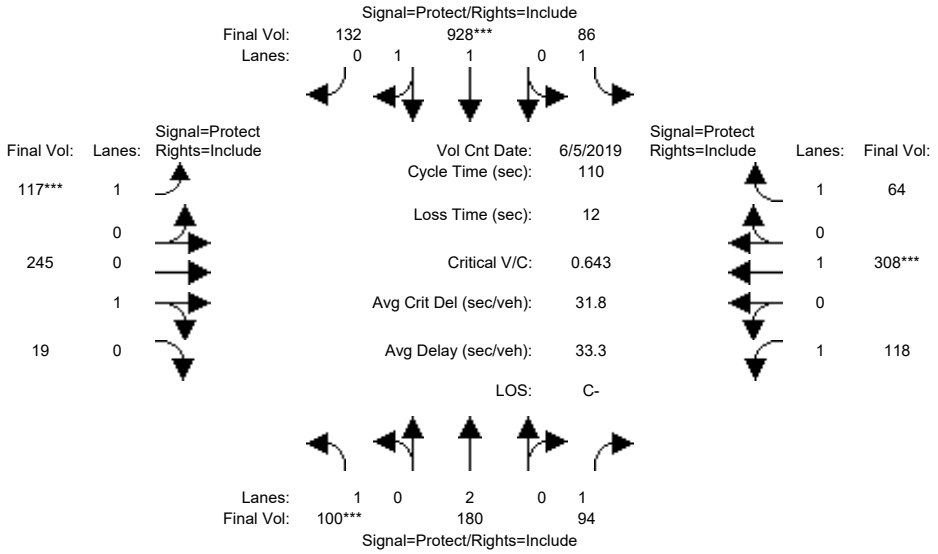
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
PM_EX

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	94	169	88	83	891	127	101	211	16	117	305	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	169	88	83	891	127	101	211	16	117	305	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	94	169	88	83	891	127	101	211	16	117	305	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.99	0.99	0.99
PHF Volume:	100	180	94	86	928	132	117	245	19	118	308	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	180	94	86	928	132	117	245	19	118	308	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	180	94	86	928	132	117	245	19	118	308	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.74	0.26	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3238	462	1750	1673	127	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.05	0.05	0.05	0.29	0.29	0.07	0.15	0.15	0.07	0.16	0.04
Crit Moves:	****				****		****				****	
Green Time:	9.8	32.7	32.7	26.1	49.0	49.0	11.5	26.2	26.2	13.0	27.7	27.7
Volume/Cap:	0.64	0.16	0.18	0.21	0.64	0.64	0.64	0.62	0.62	0.57	0.64	0.14
Uniform Del:	48.4	28.5	28.7	33.6	23.7	23.7	47.3	37.4	37.4	45.9	36.7	31.9
IncremntDel:	8.9	0.1	0.2	0.2	0.9	0.9	7.6	2.7	2.7	3.8	3.0	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	57.3	28.6	28.9	33.9	24.6	24.6	54.9	40.1	40.1	49.7	39.7	32.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.3	28.6	28.9	33.9	24.6	24.6	54.9	40.1	40.1	49.7	39.7	32.1
LOS by Move:	E+	C	C	C-	C	C	D-	D	D	D	D	C-
HCM2kAvgQ:	118	55	63	60	345	345	132	227	227	123	252	45

Note: Queue reported is the distance per lane in feet.

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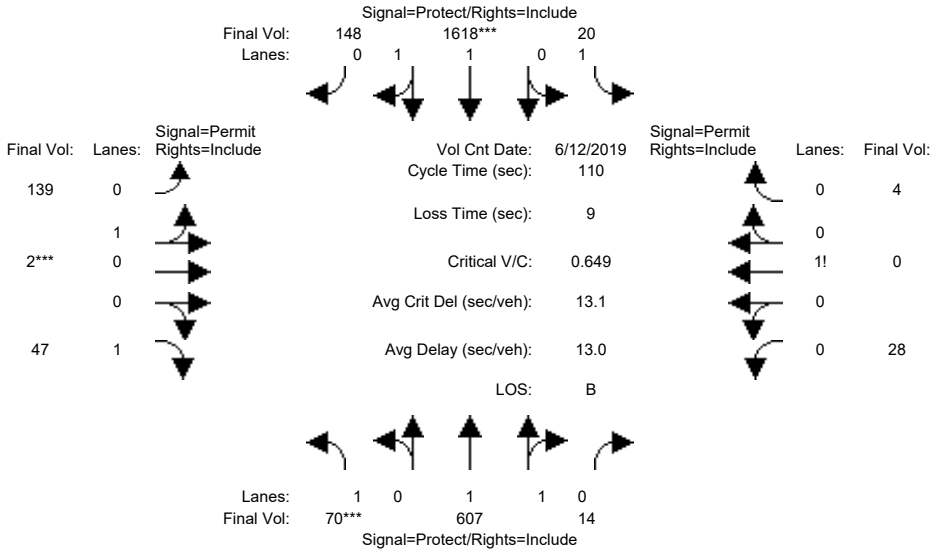
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
PM_EX

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 12 Jun 2019 <<												
Base Vol:	60	522	12	19	1505	138	118	2	40	20	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	522	12	19	1505	138	118	2	40	20	0	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	522	12	19	1505	138	118	2	40	20	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.93	0.93	0.93	0.85	0.85	0.85	0.72	0.72	0.72
PHF Volume:	70	607	14	20	1618	148	139	2	47	28	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	607	14	20	1618	148	139	2	47	28	0	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	607	14	20	1618	148	139	2	47	28	0	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	1.95	0.05	1.00	1.83	0.17	0.98	0.02	1.00	0.87	0.00	0.13
Final Sat.:	1750	3617	83	1750	3389	311	1770	30	1750	1522	0	228
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.17	0.01	0.48	0.48	0.08	0.08	0.03	0.02	0.00	0.02
Crit Moves:	****				****			****				
Green Time:	6.8	72.1	72.1	15.6	80.9	80.9	13.3	13.3	13.3	13.3	0.0	13.3
Volume/Cap:	0.65	0.26	0.26	0.08	0.65	0.65	0.65	0.65	0.22	0.15	0.00	0.15
Uniform Del:	50.5	7.9	7.9	41.0	7.3	7.3	46.1	46.1	43.7	43.3	0.0	43.3
IncremntDel:	13.1	0.1	0.1	0.1	0.6	0.6	6.7	6.7	0.5	0.3	0.0	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Delay/Veh:	63.6	7.9	7.9	41.1	7.9	7.9	52.8	52.8	44.2	43.6	0.0	43.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.6	7.9	7.9	41.1	7.9	7.9	52.8	52.8	44.2	43.6	0.0	43.6
LOS by Move:	E	A	A	D	A	A	D-	D-	D	D	A	D
HCM2kAvgQ:	66	108	108	17	395	395	148	148	42	28	0	28

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Note: Queue reported is the distance per lane in feet.

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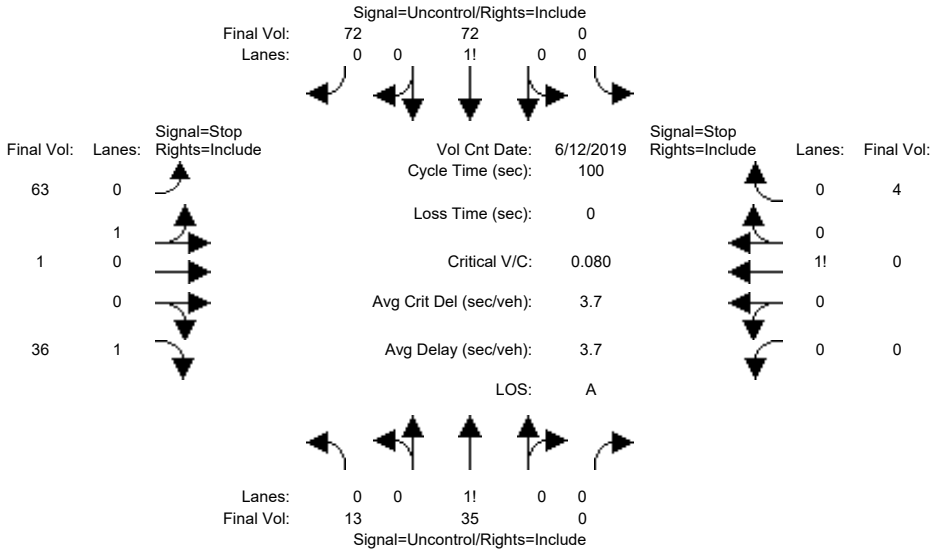
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
PM_EX

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                       Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:      10   26     0     0   57    57    59    1    34     0    0     1
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   10   26     0     0   57    57    59    1    34     0    0     1
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   10   26     0     0   57    57    59    1    34     0    0     1
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.75 0.75  0.75  0.79 0.79  0.79  0.94 0.94  0.94  0.25 0.25  0.25
PHF Volume:    13   35     0     0   72    72    63    1    36     0    0     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   13   35     0     0   72    72    63    1    36     0    0     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2 xxxxx xxxx   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  145 xxxx xxxxx  xxxx xxxx xxxxx   173  171   111  xxxx xxxx    35
Potent Cap.: 1449 xxxx xxxxx  xxxx xxxx xxxxx   793  724   945  xxxx xxxx  1044
Move Cap.:   1448 xxxx xxxxx  xxxx xxxx xxxxx   783  717   942  xxxx xxxx  1044
Volume/Cap:  0.01 xxxx  xxxx  xxxx xxxx  xxxx  0.08 0.00  0.04  xxxx xxxx  0.00
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.7 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   3.0  xxxx xxxx   0.3
Control Del:  7.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   9.0 xxxxx xxxx   8.5
LOS by Move:    A    *     *     *    *     *     *    *     A     *    *     A
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   782 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.5 xxxx xxxxx xxxxx xxxx xxxxx  10.0 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx              9.6              8.5
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   10   26     0     0   57    57    59    1    34     0    0     1
ApproachDel:    xxxxxx           xxxxxx              9.6              8.5
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=94]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=245]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=245]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   10   26     0     0   57    57    59    1    34     0    0     1
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             150
Minor Approach Volume:           94
Minor Approach Volume Threshold: 889
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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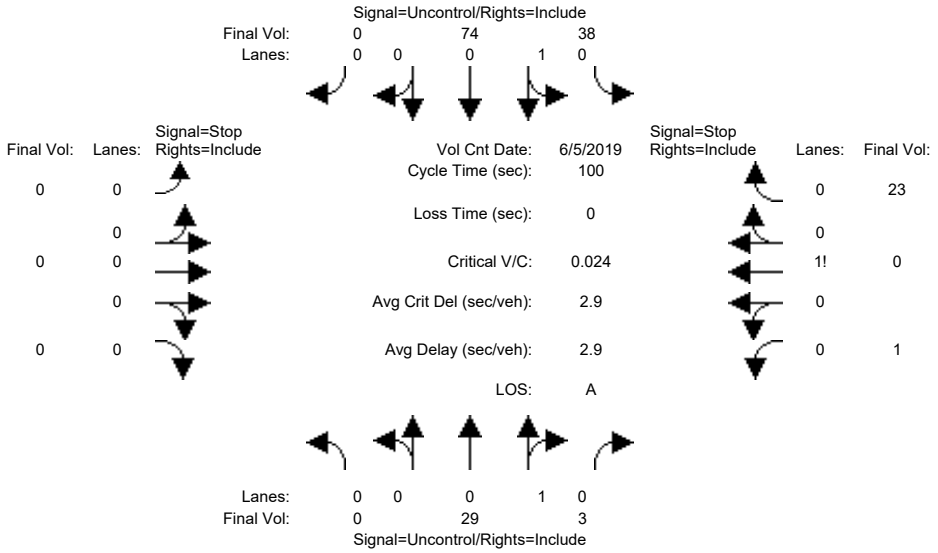
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
PM_EX

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   17     2    31   60     0     0    0     0     1    0    18
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   17     2    31   60     0     0    0     0     1    0    18
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   17     2    31   60     0     0    0     0     1    0    18
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.59 0.59  0.59  0.81 0.81  0.81  1.00 1.00  1.00  0.79 0.79  0.79
PHF Volume:     0   29     3    38   74     0     0    0     0     1    0    23
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   29     3    38   74     0     0    0     0     1    0    23
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    33 xxxx xxxxx  xxxx xxxx xxxxx   182  182    32
Potent Cap.: xxxx xxxx xxxxx  1592 xxxx xxxxx  xxxx xxxx xxxxx   812  716  1048
Move Cap.:   xxxx xxxx xxxxx  1590 xxxx xxxxx  xxxx xxxx xxxxx   796  697  1047
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.02
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.8 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx 1030 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.1 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.6 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.6
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   17     2    31   60     0     0    0     0     1    0    18
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.6
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=19]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=129]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   17     2    31   60     0     0    0     0     1    0    18
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             110
Minor Approach Volume:           19
Minor Approach Volume Threshold: 808
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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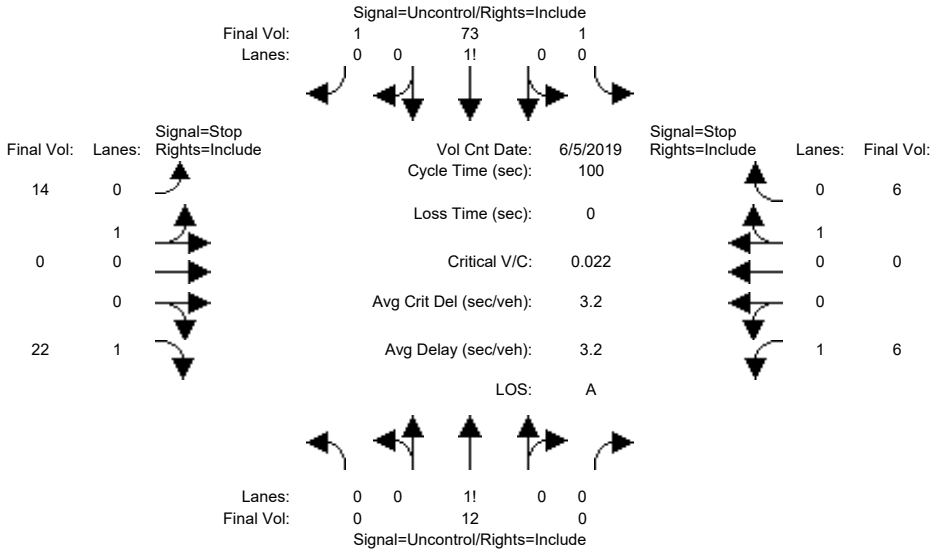
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
PM_EX

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    8     0     1   57     1     7    0    11     2    0     2
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    8     0     1   57     1     7    0    11     2    0     2
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    8     0     1   57     1     7    0    11     2    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.67 0.67  0.67  0.78 0.78  0.78  0.50 0.50  0.50  0.33 0.33  0.33
PHF Volume:     0   12     0     1   73     1    14    0    22     6    0     6
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   12     0     1   73     1    14    0    22     6    0     6
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    12 xxxx xxxxx    91   88    74    99   89    12
Potent Cap.: xxxx xxxx xxxxx  1620 xxxx xxxxx   898  806   994   887  805  1075
Move Cap.:   xxxx xxxx xxxxx  1620 xxxx xxxxx   892  805   994   867  804  1075
Volume/Cap:  xxxx xxxx  xxxx  0.00 xxxx  xxxx  0.02 0.00  0.02  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx   1.7   0.5 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.2 xxxx xxxxx xxxxx xxxx   8.7   9.2 xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   892 xxxx xxxxx  xxxx xxxx  1075
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   9.1 xxxx xxxxx xxxxx xxxx   8.4
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx              8.9              8.8
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    0    8     0     1   57     1     7    0    11     2    0     2
ApproachDel:    xxxxxx           xxxxxx              8.9              8.8
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=18]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=89]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=4]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=89]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    0    8     0     1   57     1     7    0    11     2    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             67
Minor Approach Volume:           18
Minor Approach Volume Threshold: 1143
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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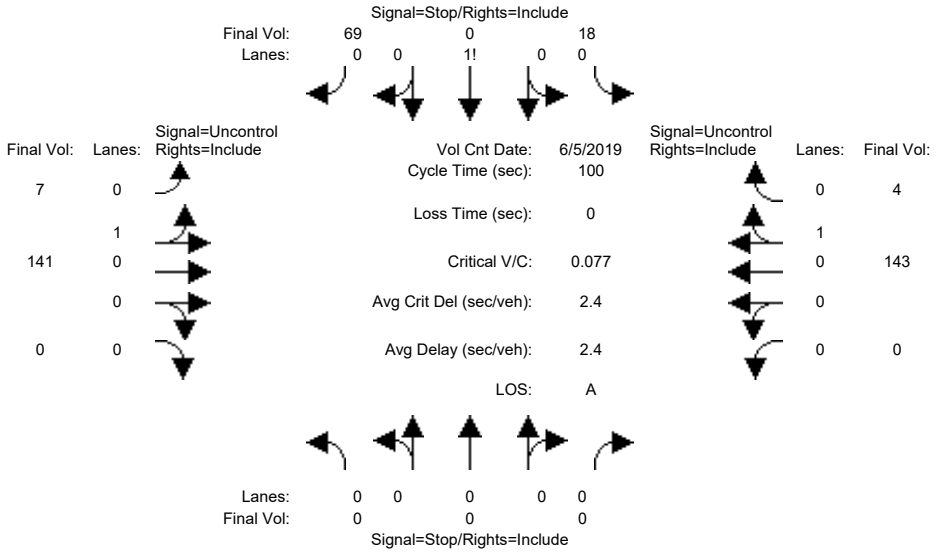
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
PM_EX

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    12    0    45     6  127     0     0  136     4
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    12    0    45     6  127     0     0  136     4
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    12    0    45     6  127     0     0  136     4
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.65 0.65  0.65  0.90 0.90  0.90  0.95 0.95  0.95
PHF Volume:     0    0     0    18    0    69     7  141     0     0  143     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    18    0    69     7  141     0     0  143     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   300  300   148   147 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   696  616   904  1441 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   693  613   902  1441 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.03 0.00  0.08  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.3 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  848 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.3 xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx  9.7 xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    A     *     A    *     *     *    *     *
ApproachDel:    xxxxxx              9.7           xxxxxx           xxxxxx
ApproachLOS:         *                A                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    12    0    45     6  127     0     0  136     4
ApproachDel:    xxxxxx              9.7           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=57]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=330]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    12    0    45     6  127     0     0  136     4
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             273
Minor Approach Volume:           57
Minor Approach Volume Threshold: 566
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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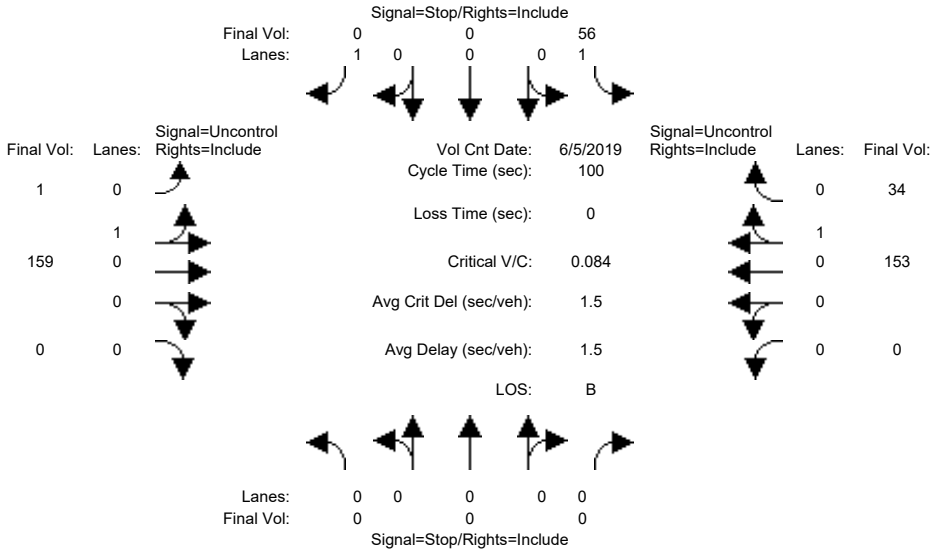
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
PM_EX

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    45    0     0     1  140     0     0  138    31
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    45    0     0     1  140     0     0  138    31
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    45    0     0     1  140     0     0  138    31
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.80 0.80  0.80  0.88 0.88  0.88  0.90 0.90  0.90
PHF Volume:     0    0     0    56    0     0     1  159     0     0  153    34
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    56    0     0     1  159     0     0  153    34
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   332 xxxx   173   188 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   667 xxxx   876  1392 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   667 xxxx   875  1392 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.08 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   6.9 xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  10.9 xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             10.9           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    45    0     0     1  140     0     0  138    31
ApproachDel:    xxxxxx             10.9           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=45]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=355]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    45    0     0     1  140     0     0  138    31
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             310
Minor Approach Volume:           45
Minor Approach Volume Threshold: 661
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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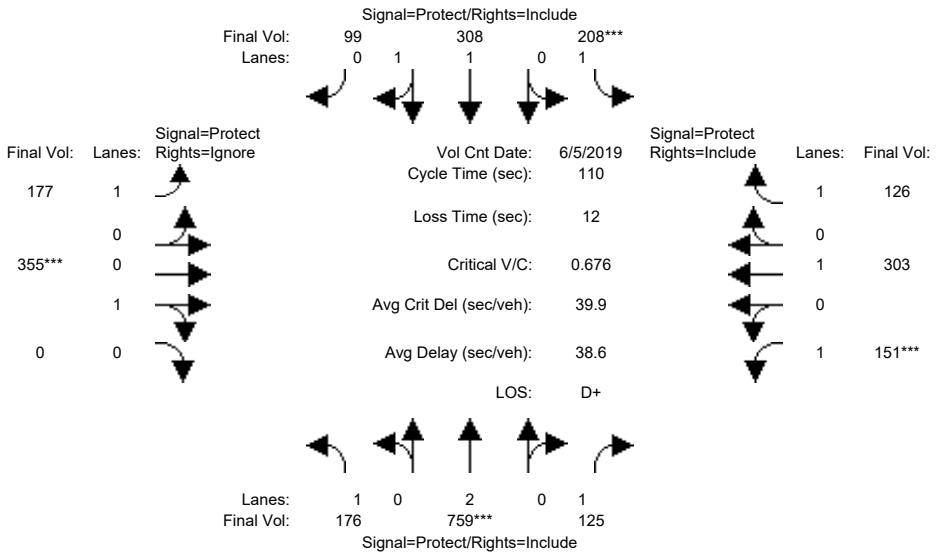
Kimley»Horn

C. EXISTING PLUS PROJECT CONDITIONS TRAFFIX OUTPUT SHEETS

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
EX+P_AM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.0	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	140	668	110	164	243	78	152	293	1	109	187	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	668	110	164	243	78	152	293	1	109	187	91
Added Vol:	15	0	0	0	0	0	0	12	0	0	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	668	110	164	243	78	152	305	1	109	218	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.79	0.79	0.79	0.86	0.86	0.00	0.72	0.72	0.72
PHF Volume:	176	759	125	208	308	99	177	355	0	151	303	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	759	125	208	308	99	177	355	0	151	303	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	176	759	125	208	308	99	177	355	0	151	303	126
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.50	0.50	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	2800	899	1750	1800	0	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.20	0.07	0.12	0.11	0.11	0.10	0.20	0.00	0.09	0.16	0.07
Crit Moves:		****		****				****		****		
Green Time:	24.8	32.5	32.5	19.3	27.1	27.1	17.9	32.1	0.0	14.1	28.3	28.3
Volume/Cap:	0.45	0.68	0.24	0.68	0.45	0.45	0.62	0.68	0.00	0.68	0.62	0.28
Uniform Del:	36.7	34.1	29.4	42.4	35.1	35.1	42.9	34.4	0.0	45.8	36.1	32.7
IncremntDel:	0.8	1.7	0.2	5.9	0.4	0.4	4.2	3.5	0.0	7.9	2.5	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Delay/Veh:	37.5	35.7	29.6	48.3	35.5	35.5	47.0	37.9	0.0	53.7	38.6	33.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.5	35.7	29.6	48.3	35.5	35.5	47.0	37.9	0.0	53.7	38.6	33.1
LOS by Move:	D+	D+	C	D	D+	D+	D	D+	A	D-	D+	C-
HCM2kAvgQ:	145	303	87	180	145	145	174	300	0	164	243	94

Note: Queue reported is the distance per lane in feet.

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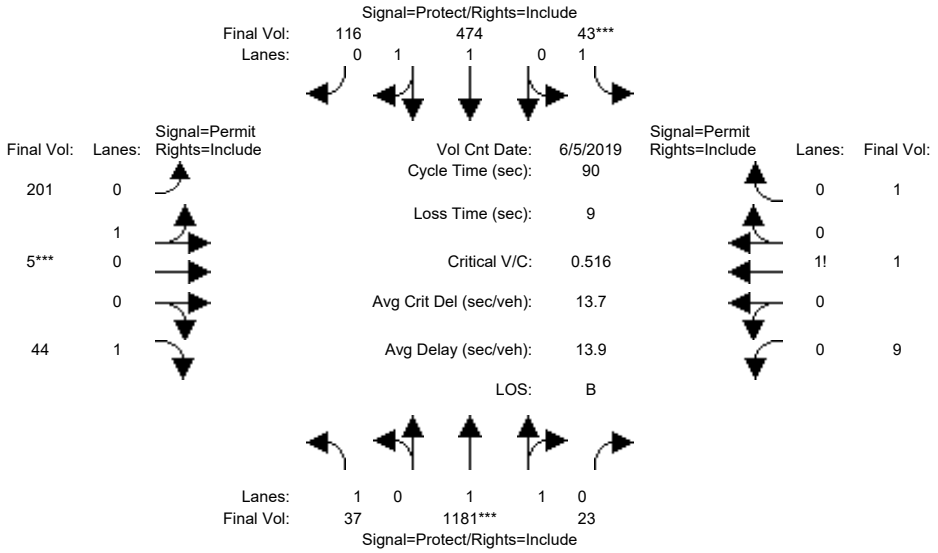
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
EX+P_AM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	33	1063	21	40	436	92	167	4	38	7	1	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1063	21	40	436	92	167	4	38	7	1	1
Added Vol:	0	0	0	0	0	15	6	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1063	21	40	436	107	173	4	38	7	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.92	0.92	0.92	0.86	0.86	0.86	0.75	0.75	0.75
PHF Volume:	37	1181	23	43	474	116	201	5	44	9	1	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	1181	23	43	474	116	201	5	44	9	1	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	1181	23	43	474	116	201	5	44	9	1	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	1.96	0.04	1.00	1.60	0.40	0.98	0.02	1.00	0.78	0.11	0.11
Final Sat.:	1750	3628	72	1750	2970	729	1759	41	1750	1361	194	194
Capacity Analysis Module:												
Vol/Sat:	0.02	0.33	0.33	0.02	0.16	0.16	0.11	0.11	0.03	0.01	0.01	0.01
Crit Moves:		****		****				****				
Green Time:	13.3	56.7	56.7	4.3	47.8	47.8	19.9	19.9	19.9	19.9	19.9	19.9
Volume/Cap:	0.14	0.52	0.52	0.52	0.30	0.30	0.52	0.52	0.11	0.03	0.03	0.03
Uniform Del:	33.4	9.1	9.1	41.8	11.8	11.8	30.8	30.8	28.0	27.5	27.5	27.5
IncremntDel:	0.3	0.2	0.2	5.5	0.1	0.1	1.2	1.2	0.1	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	33.6	9.3	9.3	47.3	11.9	11.9	32.0	32.0	28.1	27.5	27.5	27.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.6	9.3	9.3	47.3	11.9	11.9	32.0	32.0	28.1	27.5	27.5	27.5
LOS by Move:	C-	A	A	D	B+	B+	C	C	C	C	C	C
HCM2kAvgQ:	23	226	226	52	116	116	145	145	27	7	7	7

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Note: Queue reported is the distance per lane in feet.

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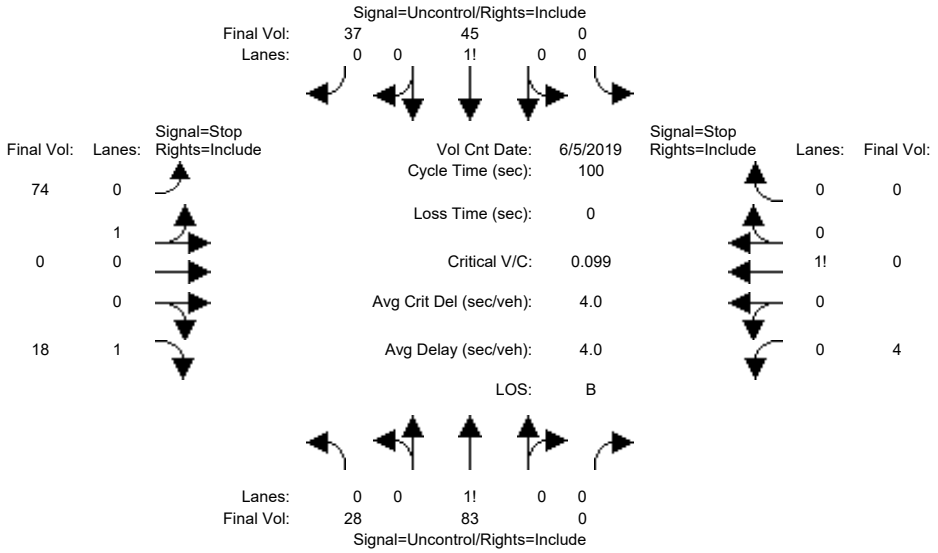
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_AM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                        Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:      24   66     0     0   22    31    42    0    10     1    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   24   66     0     0   22    31    42    0    10     1    0     0
Added Vol:      0    6     0     0   15     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   24   72     0     0   37    31    42    0    10     1    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.87 0.87  0.87  0.83 0.83  0.83  0.57 0.57  0.57  0.25 0.25  0.25
PHF Volume:    28   83     0     0   45    37    74    0    18     4    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   28   83     0     0   45    37    74    0    18     4    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1 xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   82 xxxx xxxxx  xxxx xxxx xxxxx   201  201    63   210 xxxx xxxxx
Potent Cap.: 1528 xxxx xxxxx  xxxx xxxx xxxxx   757  695  1001   752 xxxx xxxxx
Move Cap.:   1528 xxxx xxxxx  xxxx xxxx xxxxx   747  682  1001   728 xxxx xxxxx
Volume/Cap:  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.10 0.00  0.02  0.01 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.4 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   1.3   0.4 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.7  10.0 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   747 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.3 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             10.0             10.0
ApproachLOS:         *                *                B                A
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   24   72     0     0   37    31    42    0    10     1    0     0
ApproachDel:    xxxxxx           xxxxxx             10.0             10.0
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=52]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=217]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=217]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   24   72     0     0   37    31    42    0    10     1    0     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             164
Minor Approach Volume:           52
Minor Approach Volume Threshold: 861
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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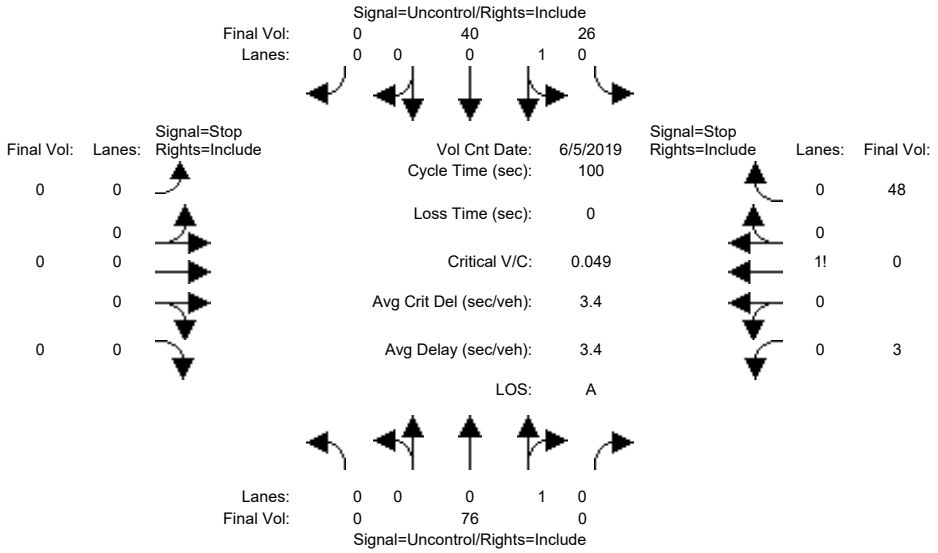
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_AM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   54     0    18   12     0     0    0     0     2    0    29
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   54     0    18   12     0     0    0     0     2    0    29
Added Vol:      0    6     0     0   15     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   60     0    18   27     0     0    0     0     2    0    29
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.79 0.79  0.79  0.68 0.68  0.68  1.00 1.00  1.00  0.60 0.60  0.60
PHF Volume:     0   76     0    26   40     0     0    0     0     3    0    48
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   76     0    26   40     0     0    0     0     3    0    48
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    76 xxxx xxxxx  xxxx xxxx xxxxx   169  169    76
Potent Cap.: xxxx xxxx xxxxx  1517 xxxx xxxxx  xxxx xxxx xxxxx   826  728   991
Move Cap.:   xxxx xxxx xxxxx  1517 xxxx xxxxx  xxxx xxxx xxxxx   815  715   991
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.05
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.3 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  977 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.2 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.9 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.9
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   60     0    18   27     0     0    0     0     2    0    29
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.9
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=31]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=136]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   60     0    18   27     0     0    0     0     2    0    29
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             105
Minor Approach Volume:           31
Minor Approach Volume Threshold: 820
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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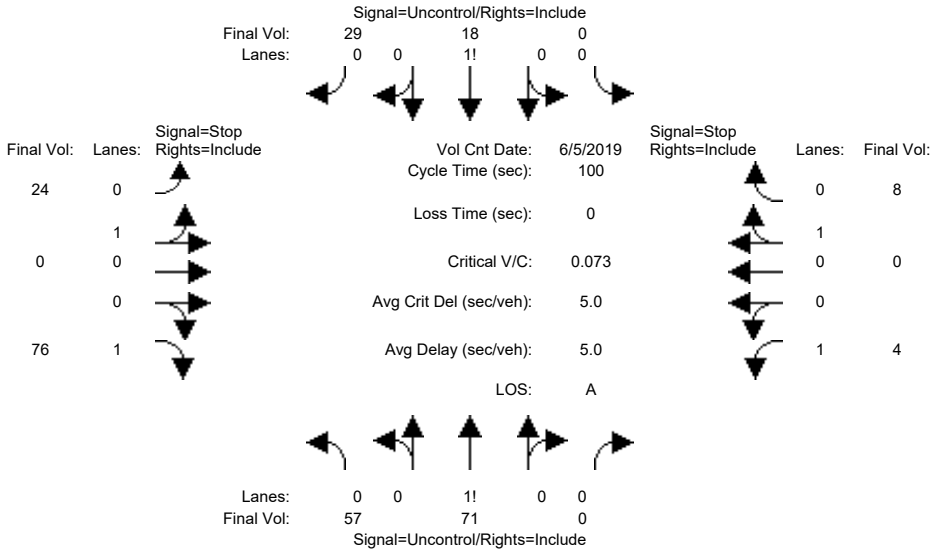
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_AM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       1   58     0     0   10     1     0    0     1     1    0     2
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    1   58     0     0   10     1     0    0     1     1    0     2
Added Vol:     46    0     0     0    0    15     6    0    18     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   47   58     0     0   10    16     6    0    19     1    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.82 0.82  0.82  0.55 0.55  0.55  0.25 0.25  0.25  0.25 0.25  0.25
PHF Volume:    57   71     0     0   18    29    24    0    76     4    0     8
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   57   71     0     0   18    29    24    0    76     4    0     8
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   47 xxxx xxxxx  xxxx xxxx xxxxx   222  218    33   256  233    71
Potent Cap.: 1554 xxxx xxxxx  xxxx xxxx xxxxx   738  684  1047   701  671   997
Move Cap.:   1554 xxxx xxxxx  xxxx xxxx xxxxx   711  658  1047   631  645   997
Volume/Cap:  0.04 xxxx  xxxx  xxxx xxxx  xxxx  0.03 0.00  0.07  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    2.9 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   5.9   0.5 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.7  10.7 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     B    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   711 xxxx xxxxx  xxxx xxxx   997
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.2 xxxx xxxxx xxxxx xxxx   8.6
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx              9.1              9.3
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   47   58     0     0   10    16     6    0    19     1    0     2
ApproachDel:    xxxxxx           xxxxxx              9.1              9.3
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=25]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=159]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=3]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=159]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   47   58     0     0   10    16     6    0    19     1    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             131
Minor Approach Volume:           25
Minor Approach Volume Threshold: 932
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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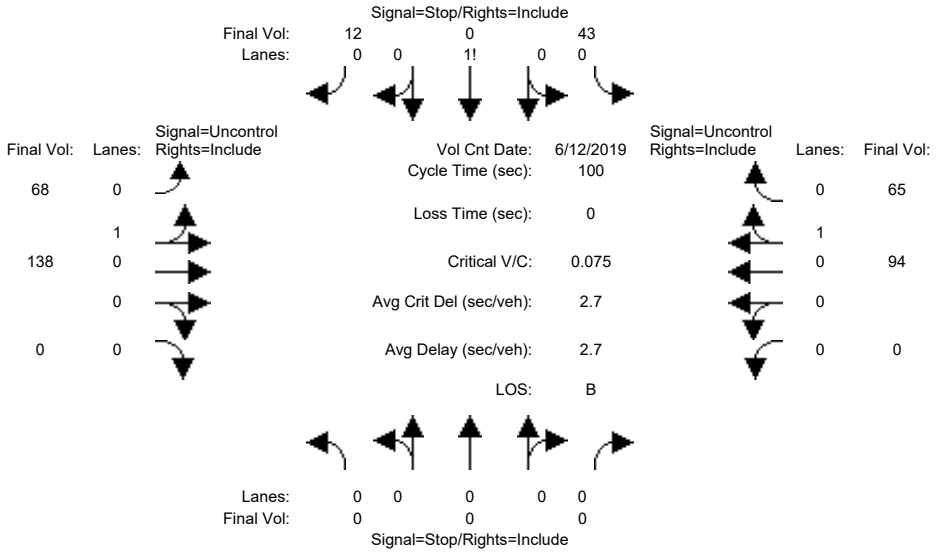
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_AM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0     7    0     7    52  106     0     0   74     5
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     7    0     7    52  106     0     0   74     5
Added Vol:      0    0     0    18    0     0     0    0     0     0    0    46
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    25    0     7    52  106     0     0   74    51
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.58 0.58  0.58  0.77 0.77  0.77  0.79 0.79  0.79
PHF Volume:     0    0     0    43    0    12    68  138     0     0   94    65
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    43    0    12    68  138     0     0   94    65
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.5  6.6   6.3   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.6  4.1   3.4   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   399  399   126   158 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   597  532   911  1415 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   575  505   911  1415 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.08 0.00  0.01  0.05 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   3.8 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  625 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.3 xxxxx   0.2 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 11.3 xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             11.3           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    25    0     7    52  106     0     0   74    51
ApproachDel:    xxxxxx             11.3           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=32]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=315]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    25    0     7    52  106     0     0   74    51
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             283
Minor Approach Volume:           32
Minor Approach Volume Threshold: 556
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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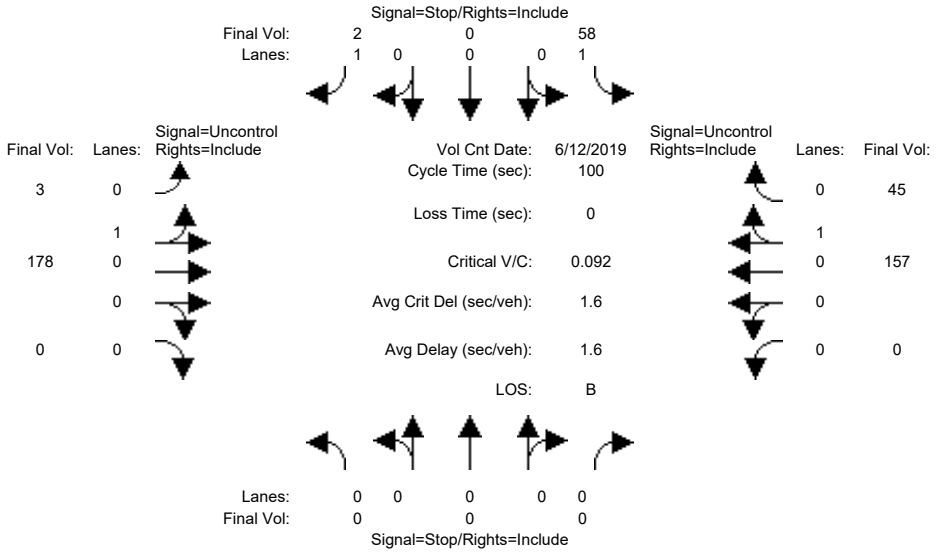
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_AM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0    36    0     1     2  114     0     0   89    39
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    36    0     1     2  114     0     0   89    39
Added Vol:      0    0     0     0    0     0     0   18     0     0   46     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    36    0     1     2  132     0     0  135    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.62 0.62  0.62  0.74 0.74  0.74  0.86 0.86  0.86
PHF Volume:     0    0     0    58    0     2     3  178     0     0  157    45
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    58    0     2     3  178     0     0  157    45
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   363 xxxx   180   202 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   634 xxxx   861  1364 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   633 xxxx   861  1364 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.09 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   7.5 xxxx   0.1   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  11.3 xxxx   9.2   7.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     A     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             11.2           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    36    0     1     2  132     0     0  135    39
ApproachDel:    xxxxxx             11.2           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=37]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=345]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    36    0     1     2  132     0     0  135    39
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             308
Minor Approach Volume:           37
Minor Approach Volume Threshold: 663
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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jurisdiction.  Consideration of the other signal warrants, which is beyond
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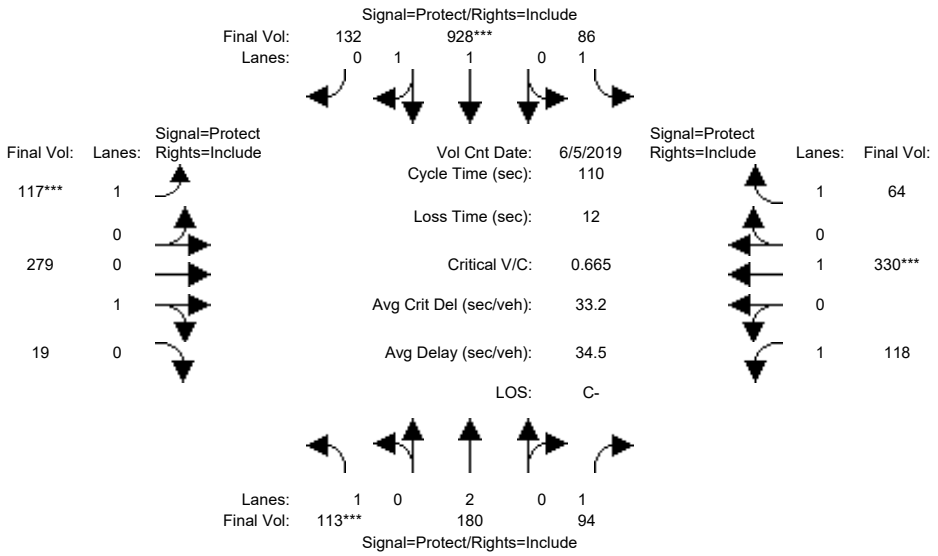
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
EX+P_PM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	94	169	88	83	891	127	101	211	16	117	305	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	169	88	83	891	127	101	211	16	117	305	63
Added Vol:	12	0	0	0	0	0	0	29	0	0	22	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	169	88	83	891	127	101	240	16	117	327	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.99	0.99	0.99
PHF Volume:	113	180	94	86	928	132	117	279	19	118	330	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	180	94	86	928	132	117	279	19	118	330	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	113	180	94	86	928	132	117	279	19	118	330	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.74	0.26	1.00	0.94	0.06	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3238	462	1750	1687	112	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.05	0.05	0.05	0.29	0.29	0.07	0.17	0.17	0.07	0.17	0.04
Crit Moves:	****				****		****				****	
Green Time:	10.7	32.3	32.3	25.8	47.4	47.4	11.1	27.7	27.7	12.2	28.8	28.8
Volume/Cap:	0.66	0.16	0.18	0.21	0.66	0.66	0.66	0.66	0.66	0.61	0.66	0.14
Uniform Del:	47.9	28.8	29.0	33.9	24.9	24.9	47.6	36.9	36.9	46.6	36.3	31.1
IncremntDel:	9.5	0.1	0.2	0.3	1.1	1.1	9.2	3.5	3.5	5.6	3.4	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	57.5	28.9	29.2	34.1	26.0	26.0	56.8	40.4	40.4	52.2	39.7	31.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.5	28.9	29.2	34.1	26.0	26.0	56.8	40.4	40.4	52.2	39.7	31.3
LOS by Move:	E+	C	C	C-	C	C	E+	D	D	D-	D	C
HCM2kAvgQ:	131	56	64	60	355	355	135	259	259	128	271	44

Note: Queue reported is the distance per lane in feet.

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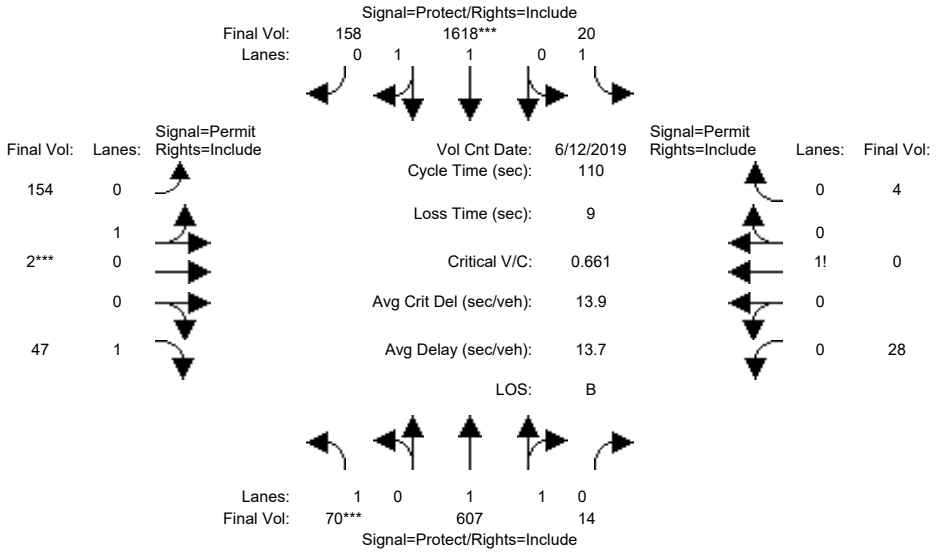
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
EX+P_PM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 12 Jun 2019 <<												
Base Vol:	60	522	12	19	1505	138	118	2	40	20	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	522	12	19	1505	138	118	2	40	20	0	3
Added Vol:	0	0	0	0	0	9	13	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	522	12	19	1505	147	131	2	40	20	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.93	0.93	0.93	0.85	0.85	0.85	0.72	0.72	0.72
PHF Volume:	70	607	14	20	1618	158	154	2	47	28	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	607	14	20	1618	158	154	2	47	28	0	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	607	14	20	1618	158	154	2	47	28	0	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	1.95	0.05	1.00	1.82	0.18	0.98	0.02	1.00	0.87	0.00	0.13
Final Sat.:	1750	3617	83	1750	3371	329	1773	27	1750	1522	0	228
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.17	0.01	0.48	0.48	0.09	0.09	0.03	0.02	0.00	0.02
Crit Moves:	****				****			****				
Green Time:	6.6	71.1	71.1	15.4	79.9	79.9	14.5	14.5	14.5	14.5	0.0	14.5
Volume/Cap:	0.66	0.26	0.26	0.08	0.66	0.66	0.66	0.66	0.20	0.14	0.00	0.14
Uniform Del:	50.6	8.3	8.3	41.1	7.9	7.9	45.4	45.4	42.6	42.3	0.0	42.3
IncremntDel:	14.5	0.1	0.1	0.1	0.6	0.6	6.8	6.8	0.4	0.3	0.0	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Delay/Veh:	65.1	8.3	8.3	41.3	8.5	8.5	52.2	52.2	43.1	42.5	0.0	42.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.1	8.3	8.3	41.3	8.5	8.5	52.2	52.2	43.1	42.5	0.0	42.5
LOS by Move:	E	A	A	D	A	A	D-	D-	D	D	A	D
HCM2kAvgQ:	66	111	111	17	414	414	162	162	41	27	0	27

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Note: Queue reported is the distance per lane in feet.

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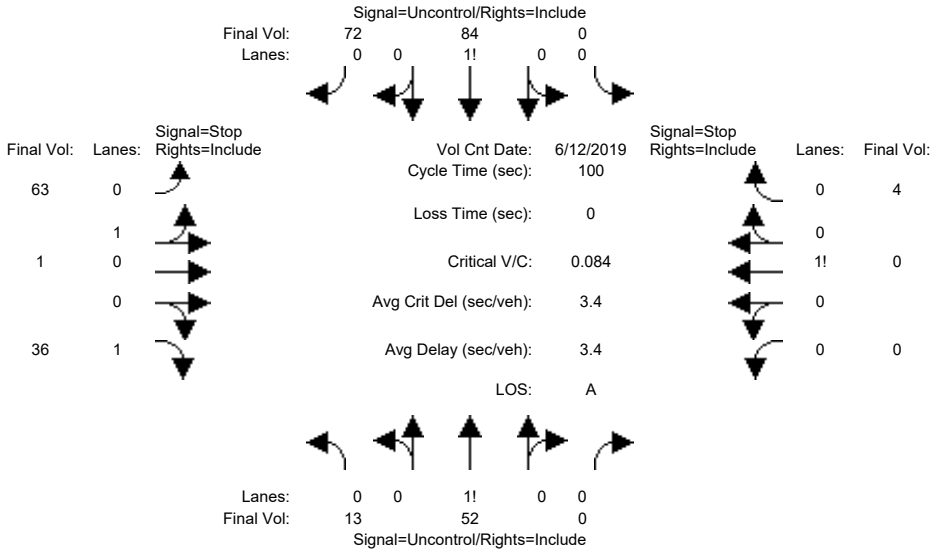
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_PM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                        Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:      10   26     0     0   57    57    59    1    34     0    0     1
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   10   26     0     0   57    57    59    1    34     0    0     1
Added Vol:      0   13     0     0    9     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   10   39     0     0   66    57    59    1    34     0    0     1
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.75 0.75  0.75  0.79 0.79  0.79  0.94 0.94  0.94  0.25 0.25  0.25
PHF Volume:    13   52     0     0   84    72    63    1    36     0    0     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   13   52     0     0   84    72    63    1    36     0    0     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2 xxxxx xxxx   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  157 xxxx xxxxx  xxxx xxxx xxxxx   201  199   123  xxxx xxxx    52
Potent Cap.: 1436 xxxx xxxxx  xxxx xxxx xxxxx   759  698   931  xxxx xxxx  1021
Move Cap.:   1434 xxxx xxxxx  xxxx xxxx xxxxx   750  691   929  xxxx xxxx  1021
Volume/Cap:  0.01 xxxx  xxxx  xxxx xxxx  xxxx  0.08 0.00  0.04  xxxx xxxx  0.00
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.7 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   3.0  xxxx xxxx   0.3
Control Del:  7.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   9.0 xxxxx xxxx   8.5
LOS by Move:    A    *     *     *    *     *     *    *     A     *    *     A
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   749 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.5 xxxx xxxxx xxxxx xxxx xxxxx  10.3 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx              9.8              8.5
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   10   39     0     0   66    57    59    1    34     0    0     1
ApproachDel:    xxxxxx           xxxxxx              9.8              8.5
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=94]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=267]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=267]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   10   39     0     0   66    57    59    1    34     0    0     1
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             172
Minor Approach Volume:           94
Minor Approach Volume Threshold: 846
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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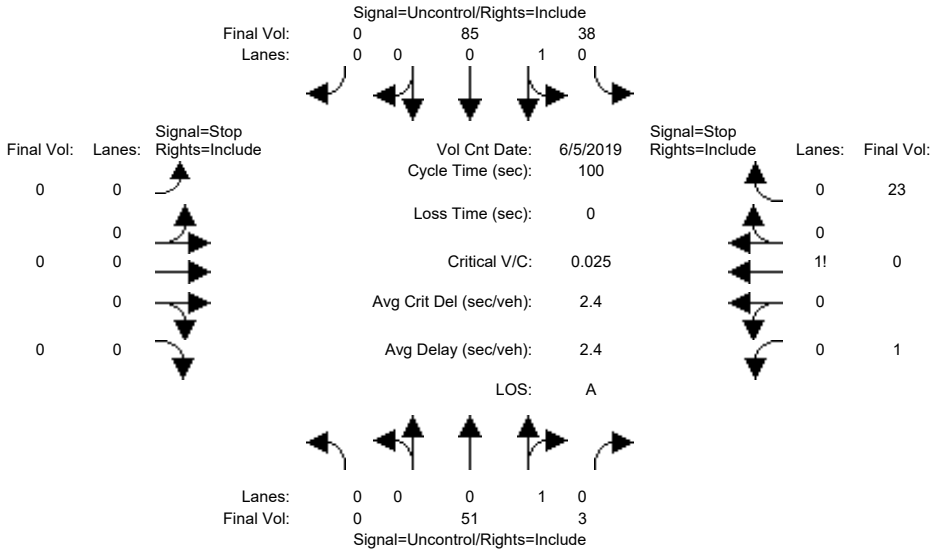
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_PM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   17     2    31   60     0     0    0     0     1    0    18
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   17     2    31   60     0     0    0     0     1    0    18
Added Vol:      0   13     0     0    9     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   30     2    31   69     0     0    0     0     1    0    18
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.59 0.59  0.59  0.81 0.81  0.81  1.00 1.00  1.00  0.79 0.79  0.79
PHF Volume:     0   51     3    38   85     0     0    0     0     1    0    23
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   51     3    38   85     0     0    0     0     1    0    23
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    55 xxxx xxxxx  xxxx xxxx xxxxx   215  215    54
Potent Cap.: xxxx xxxx xxxxx  1563 xxxx xxxxx  xxxx xxxx xxxxx   777  686  1019
Move Cap.:   xxxx xxxx xxxxx  1561 xxxx xxxxx  xxxx xxxx xxxxx   762  668  1019
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.02
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.9 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx 1001 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.1 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.7 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.7
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   30     2    31   69     0     0    0     0     1    0    18
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.7
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=19]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=151]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   30     2    31   69     0     0    0     0     1    0    18
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             132
Minor Approach Volume:           19
Minor Approach Volume Threshold: 759
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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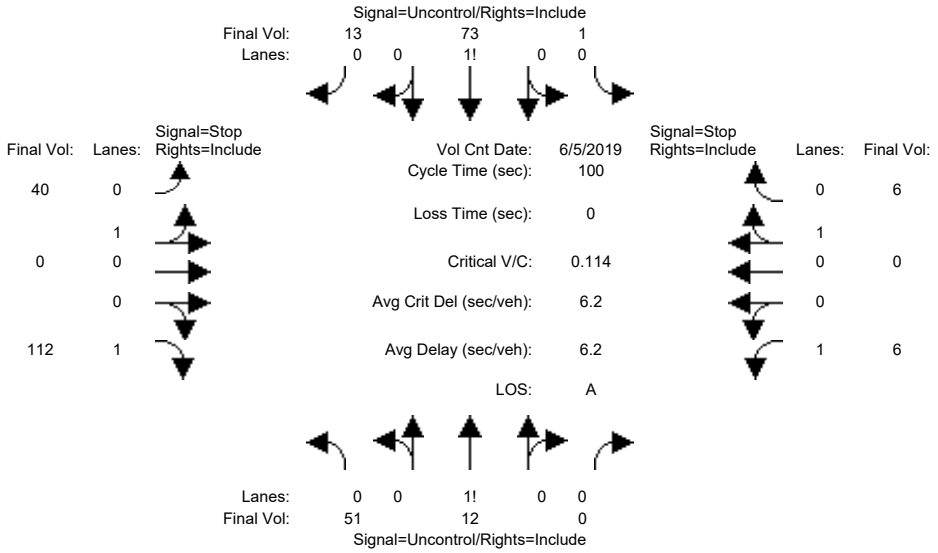
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_PM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    8     0     1   57     1     7    0    11     2    0     2
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    8     0     1   57     1     7    0    11     2    0     2
Added Vol:     34    0     0     0    0     9    13    0    45     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   34    8     0     1   57    10    20    0    56     2    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.67 0.67  0.67  0.78 0.78  0.78  0.50 0.50  0.50  0.33 0.33  0.33
PHF Volume:    51   12     0     1   73    13    40    0   112     6    0     6
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   51   12     0     1   73    13    40    0   112     6    0     6
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx   4.1 xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:  2.2 xxxx xxxxx   2.2 xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   86 xxxx xxxxx    12 xxxx xxxxx   199  195    79   251  202    12
Potent Cap.: 1523 xxxx xxxxx  1620 xxxx xxxxx   765  704   986   706  698  1075
Move Cap.:   1523 xxxx xxxxx  1620 xxxx xxxxx   740  679   986   609  673  1075
Volume/Cap:  0.03 xxxx  xxxx  0.00 xxxx  xxxx  0.05 0.00  0.11  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    2.6 xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx   9.6   0.8 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx   7.2 xxxx xxxxx xxxxx xxxx   9.1  11.0 xxxx xxxxx
LOS by Move:    A    *     *     A    *     *     *    *     A     B    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   740 xxxx xxxxx  xxxx xxxx  1075
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.1 xxxx xxxxx xxxxx xxxx   8.4
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx              9.4              9.7
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   34    8     0     1   57    10    20    0    56     2    0     2
ApproachDel:    xxxxxx           xxxxxx              9.4              9.7
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=76]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=190]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=4]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=190]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   34    8     0     1   57    10    20    0    56     2    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             110
Minor Approach Volume:           76
Minor Approach Volume Threshold: 987
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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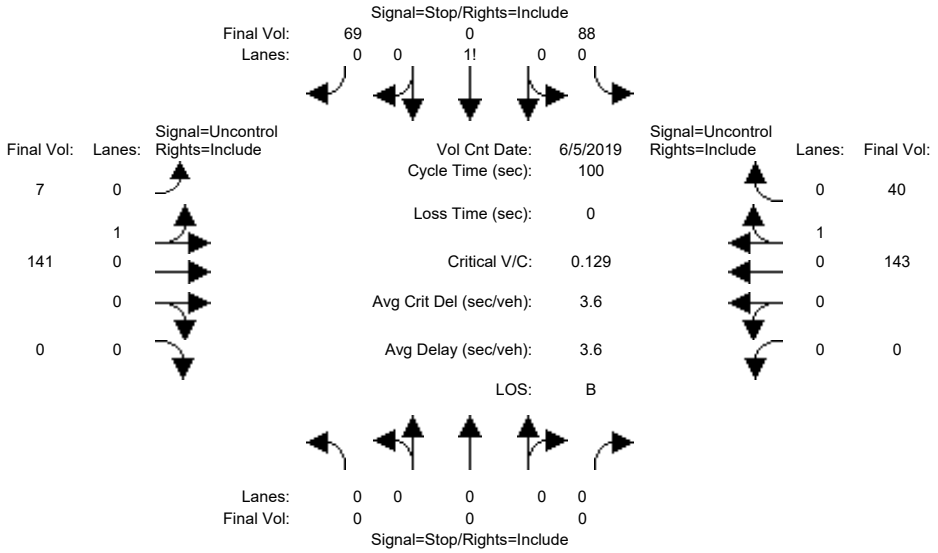
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_PM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    12    0    45     6  127     0     0  136     4
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    12    0    45     6  127     0     0  136     4
Added Vol:      0    0     0    45    0     0     0    0     0     0    0    34
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    57    0    45     6  127     0     0  136    38
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.65 0.65  0.65  0.90 0.90  0.90  0.95 0.95  0.95
PHF Volume:     0    0     0    88    0    69     7  141     0     0  143    40
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    88    0    69     7  141     0     0  143    40
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   318  318   166   183 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   680  602   883  1398 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   677  599   881  1398 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.13 0.00  0.08  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.4 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  754 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.8 xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 11.0 xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             11.0           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    57    0    45     6  127     0     0  136    38
ApproachDel:    xxxxxx             11.0           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=102]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=409]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    57    0    45     6  127     0     0  136    38
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             307
Minor Approach Volume:           102
Minor Approach Volume Threshold: 534
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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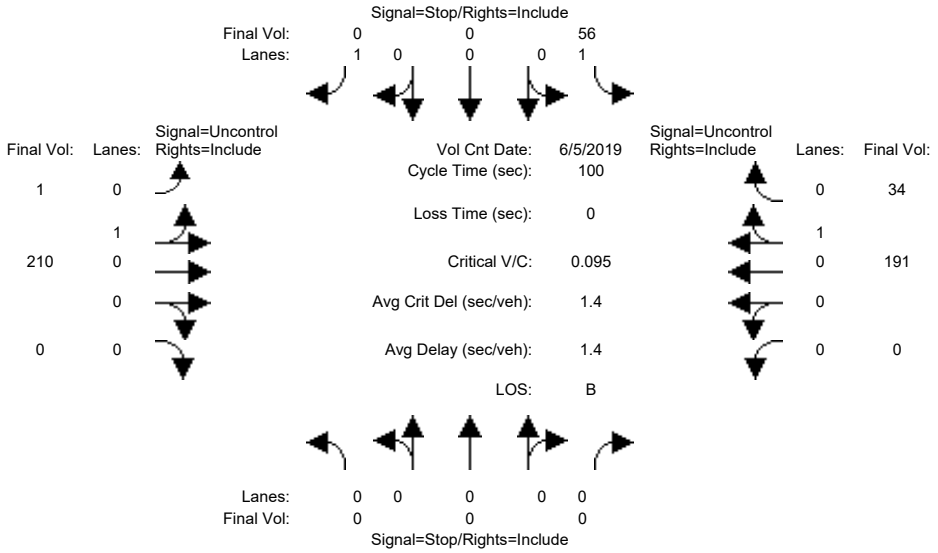
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
EX+P_PM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    45    0     0     1  140     0     0  138    31
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    45    0     0     1  140     0     0  138    31
Added Vol:      0    0     0     0    0     0     0   45     0     0   34     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    45    0     0     1  185     0     0  172    31
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.80 0.80  0.80  0.88 0.88  0.88  0.90 0.90  0.90
PHF Volume:     0    0     0    56    0     0     1  210     0     0  191    34
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    56    0     0     1  210     0     0  191    34
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   421 xxxx   210   226 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   593 xxxx   835  1349 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   593 xxxx   834  1349 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.09 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   7.8 xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  11.7 xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             11.7           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    45    0     0     1  185     0     0  172    31
ApproachDel:    xxxxxx             11.7           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=45]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=434]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    45    0     0     1  185     0     0  172    31
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             389
Minor Approach Volume:           45
Minor Approach Volume Threshold: 590
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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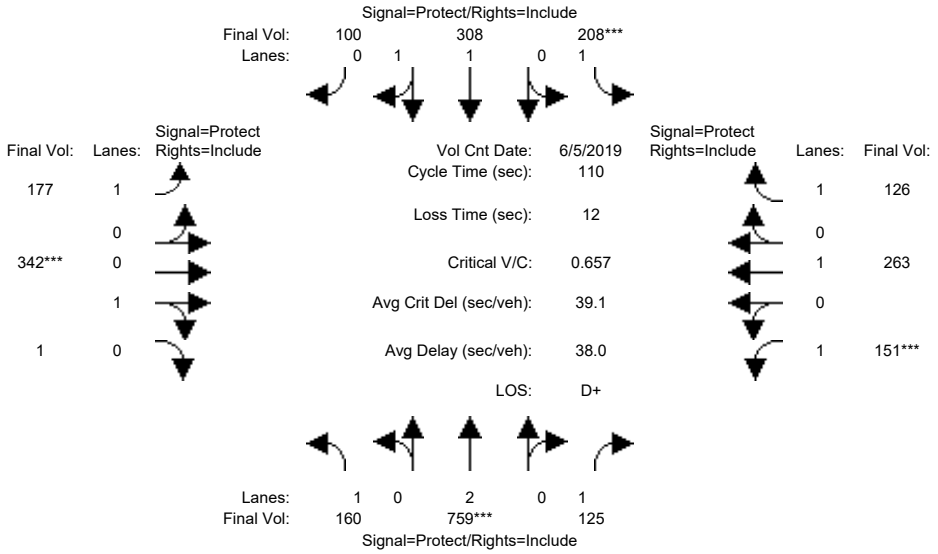
Kimley»Horn

D. BACKGROUND CONDITIONS

TRAFFIX OUTPUT SHEETS

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BKG_AM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.0	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	140	668	110	164	243	78	152	293	1	109	187	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	668	110	164	243	78	152	293	1	109	187	91
Added Vol:	1	0	0	0	0	1	0	1	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	141	668	110	164	243	79	152	294	1	109	189	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.79	0.79	0.79	0.86	0.86	0.86	0.72	0.72	0.72
PHF Volume:	160	759	125	208	308	100	177	342	1	151	263	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	759	125	208	308	100	177	342	1	151	263	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	759	125	208	308	100	177	342	1	151	263	126
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.48	0.52	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	2809	913	1750	1893	6	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.07	0.12	0.11	0.11	0.10	0.18	0.18	0.09	0.14	0.07
Crit Moves:		****		****				****		****		
Green Time:	24.3	33.4	33.4	19.9	29.0	29.0	18.9	30.2	30.2	14.5	25.8	25.8
Volume/Cap:	0.42	0.66	0.23	0.66	0.42	0.42	0.59	0.66	0.66	0.66	0.59	0.31
Uniform Del:	36.8	33.3	28.7	41.9	33.5	33.5	42.0	35.3	35.3	45.4	37.4	34.7
IncremntDel:	0.7	1.4	0.2	5.0	0.3	0.3	3.0	3.1	3.1	6.8	2.1	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	37.5	34.7	28.9	46.9	33.8	33.8	45.0	38.4	38.4	52.2	39.4	35.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.5	34.7	28.9	46.9	33.8	33.8	45.0	38.4	38.4	52.2	39.4	35.1
LOS by Move:	D+	C-	C	D	C-	C-	D	D+	D+	D-	D	D+
HCM2kAvgQ:	131	297	85	178	140	140	168	276	276	161	212	97

Note: Queue reported is the distance per lane in feet.

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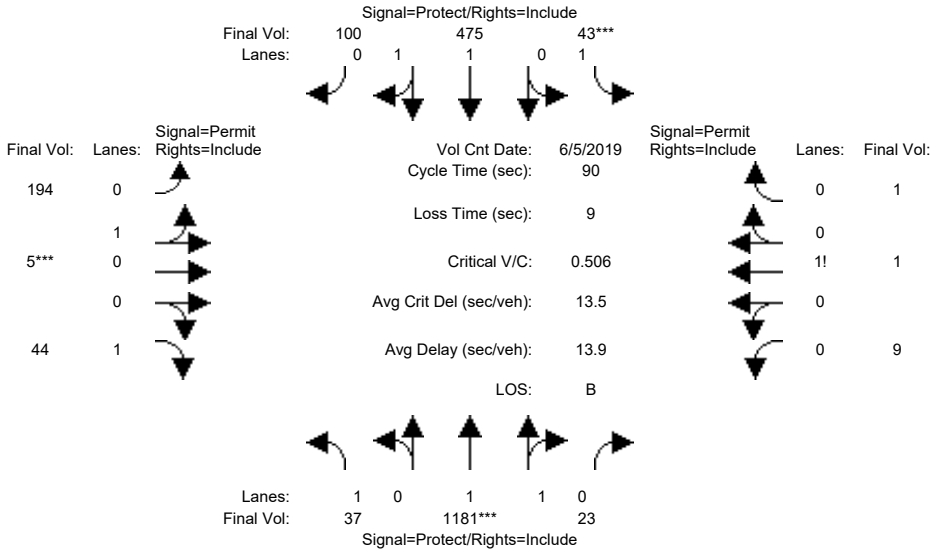
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BKG_AM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	33	1063	21	40	436	92	167	4	38	7	1	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1063	21	40	436	92	167	4	38	7	1	1
Added Vol:	0	0	0	0	1	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1063	21	40	437	92	167	4	38	7	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.92	0.92	0.92	0.86	0.86	0.86	0.75	0.75	0.75
PHF Volume:	37	1181	23	43	475	100	194	5	44	9	1	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	1181	23	43	475	100	194	5	44	9	1	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	1181	23	43	475	100	194	5	44	9	1	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.96	0.04	1.00	1.63	0.37	0.98	0.02	1.00	0.79	0.10	0.11
Final Sat.:	1750	3720	73	1750	3093	651	1712	41	1750	1373	196	196
Capacity Analysis Module:												
Vol/Sat:	0.02	0.32	0.32	0.02	0.15	0.15	0.11	0.11	0.03	0.01	0.01	0.01
Crit Moves:		****		****				****				
Green Time:	13.7	56.4	56.4	4.4	47.2	47.2	20.2	20.2	20.2	20.2	20.2	20.2
Volume/Cap:	0.14	0.51	0.51	0.51	0.29	0.29	0.51	0.51	0.11	0.03	0.03	0.03
Uniform Del:	33.1	9.2	9.2	41.7	12.0	12.0	30.6	30.6	27.8	27.3	27.3	27.3
IncremntDel:	0.2	0.2	0.2	4.8	0.1	0.1	1.1	1.1	0.1	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	33.3	9.4	9.4	46.6	12.1	12.1	31.6	31.6	27.9	27.3	27.3	27.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.3	9.4	9.4	46.6	12.1	12.1	31.6	31.6	27.9	27.3	27.3	27.3
LOS by Move:	C-	A	A	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	22	220	220	51	113	113	143	143	27	7	7	7

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Note: Queue reported is the distance per lane in feet.

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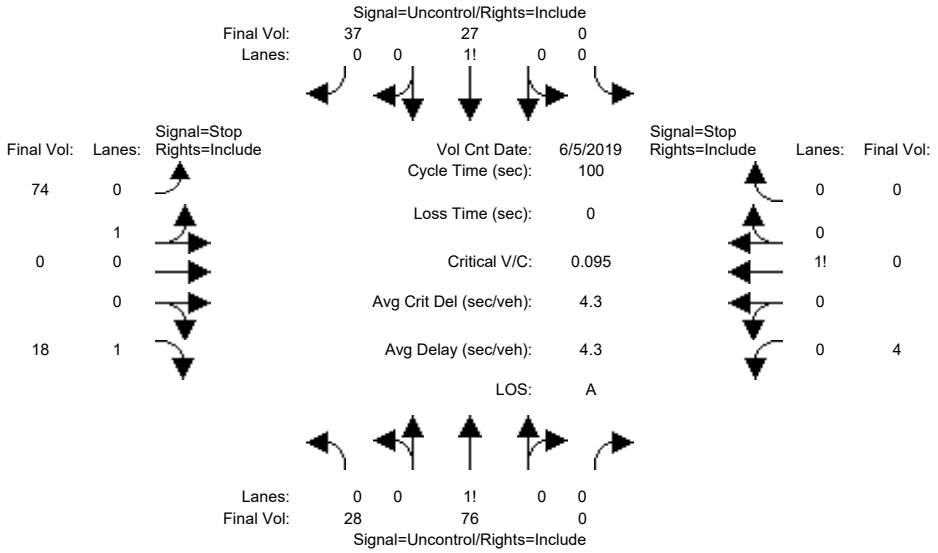
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_AM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                       Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:      24   66     0     0   22    31    42    0    10     1    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   24   66     0     0   22    31    42    0    10     1    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   24   66     0     0   22    31    42    0    10     1    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.87 0.87  0.87  0.83 0.83  0.83  0.57 0.57  0.57  0.25 0.25  0.25
PHF Volume:    28   76     0     0   27    37    74    0    18     4    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   28   76     0     0   27    37    74    0    18     4    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1 xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   64 xxxx xxxxx  xxxx xxxx xxxxx   176  176    45   185 xxxx xxxxx
Potent Cap.: 1551 xxxx xxxxx  xxxx xxxx xxxxx   786  717  1025   780 xxxx xxxxx
Move Cap.:   1551 xxxx xxxxx  xxxx xxxx xxxxx   775  704  1025   756 xxxx xxxxx
Volume/Cap:  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.10 0.00  0.02  0.01 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.4 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   1.3   0.4 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.6   9.8 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   775 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.1 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx              9.8              9.8
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   24   66     0     0   22    31    42    0    10     1    0     0
ApproachDel:    xxxxxx           xxxxxx              9.8              9.8
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=52]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=196]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=196]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   24   66     0     0   22    31    42    0    10     1    0     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             143
Minor Approach Volume:           52
Minor Approach Volume Threshold: 904
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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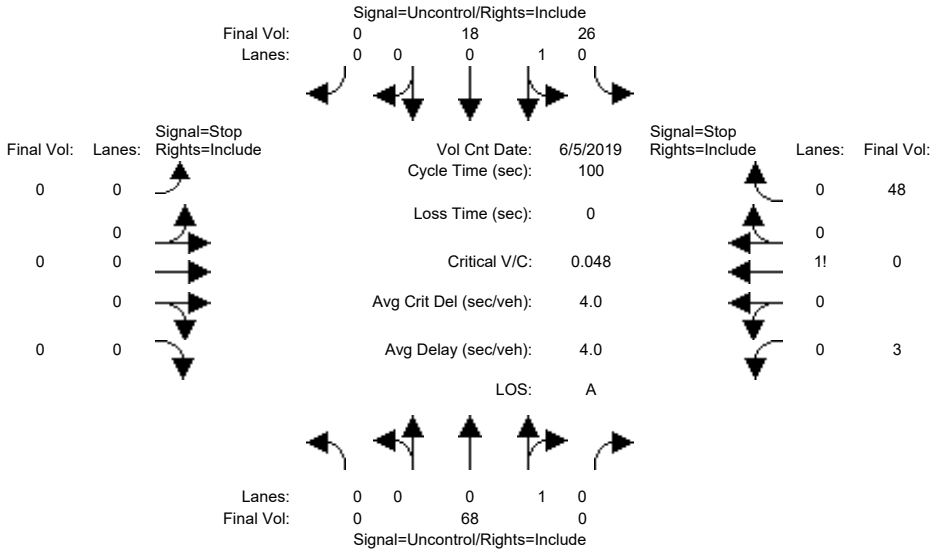
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_AM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   54     0    18   12     0     0    0     0     2    0    29
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   54     0    18   12     0     0    0     0     2    0    29
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   54     0    18   12     0     0    0     0     2    0    29
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.79 0.79  0.79  0.68 0.68  0.68  1.00 1.00  1.00  0.60 0.60  0.60
PHF Volume:     0   68     0    26   18     0     0    0     0     3    0    48
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   68     0    26   18     0     0    0     0     3    0    48
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    68 xxxx xxxxx  xxxx xxxx xxxxx   139  139    68
Potent Cap.: xxxx xxxx xxxxx  1526 xxxx xxxxx  xxxx xxxx xxxxx   859  756  1000
Move Cap.:   xxxx xxxx xxxxx  1526 xxxx xxxxx  xxxx xxxx xxxxx   847  742  1000
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.05
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.3 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  989 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.2 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.8 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.8
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   54     0    18   12     0     0    0     0     2    0    29
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.8
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=31]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=115]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   54     0    18   12     0     0    0     0     2    0    29
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             84
Minor Approach Volume:           31
Minor Approach Volume Threshold: 880
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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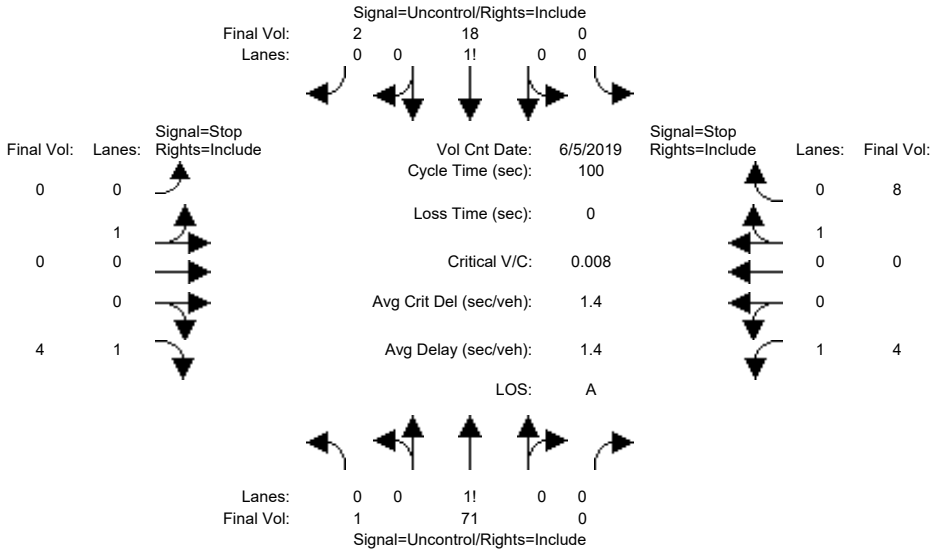
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_AM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                   Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       1   58     0     0   10     1     0    0     1     1    0     2
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    1   58     0     0   10     1     0    0     1     1    0     2
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    1   58     0     0   10     1     0    0     1     1    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.82 0.82  0.82  0.55 0.55  0.55  0.25 0.25  0.25  0.25 0.25  0.25
PHF Volume:     1   71     0     0   18     2     0    0     4     4    0     8
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    1   71     0     0   18     2     0    0     4     4    0     8
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   20 xxxx xxxxx  xxxx xxxx xxxxx    96   92    19    94   93    71
Potent Cap.: 1590 xxxx xxxxx  xxxx xxxx xxxxx   891  802  1065   894  801   997
Move Cap.:   1590 xxxx xxxxx  xxxx xxxx xxxxx   883  801  1065   890  800   997
Volume/Cap:  0.00 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.00  0.00 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.1 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3   0.3 xxxx xxxxx
Control Del:  7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.4   9.1 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx     0 xxxx xxxxx  xxxx xxxx   997
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:  7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.6
Shared LOS:     A    *     *     *    *     *     *    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx               8.4               8.8
ApproachLOS:         *                *                 A                 A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    1   58     0     0   10     1     0    0     1     1    0     2
ApproachDel:    xxxxxx           xxxxxx              8.4              8.8
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=74]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=3]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=74]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    1   58     0     0   10     1     0    0     1     1    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             70
Minor Approach Volume:           3
Minor Approach Volume Threshold: 1129
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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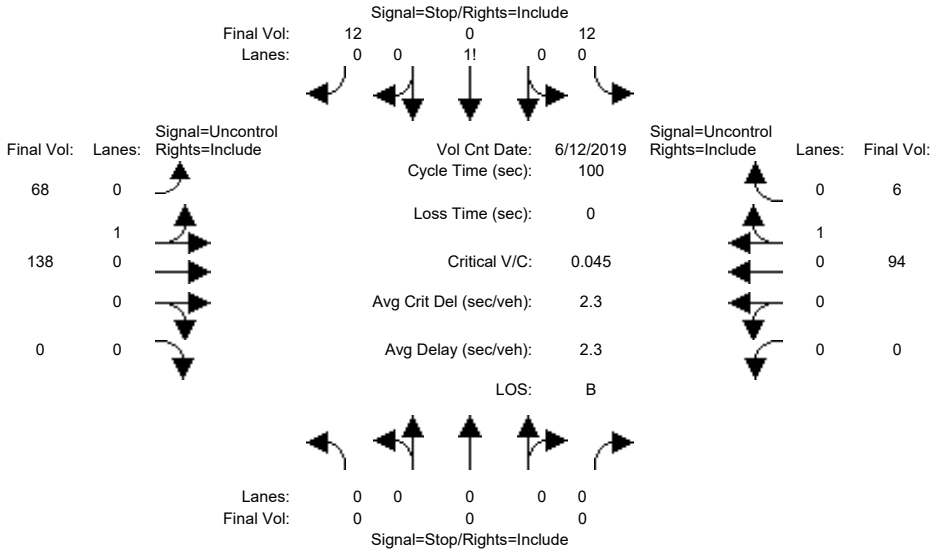
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_AM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0     7    0     7    52  106     0     0   74     5
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     7    0     7    52  106     0     0   74     5
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     7    0     7    52  106     0     0   74     5
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.58 0.58  0.58  0.77 0.77  0.77  0.79 0.79  0.79
PHF Volume:     0    0     0    12    0    12    68  138     0     0   94     6
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    12    0    12    68  138     0     0   94     6
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.5  6.6   6.3   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.6  4.1   3.4   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   370  370    97   100 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   621  552   946  1486 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   599  526   946  1486 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.02 0.00  0.01  0.05 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   3.6 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  733 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.1 xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 10.1 xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             10.1           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0     7    0     7    52  106     0     0   74     5
ApproachDel:    xxxxxx             10.1           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=14]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=251]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0     7    0     7    52  106     0     0   74     5
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             237
Minor Approach Volume:           14
Minor Approach Volume Threshold: 603
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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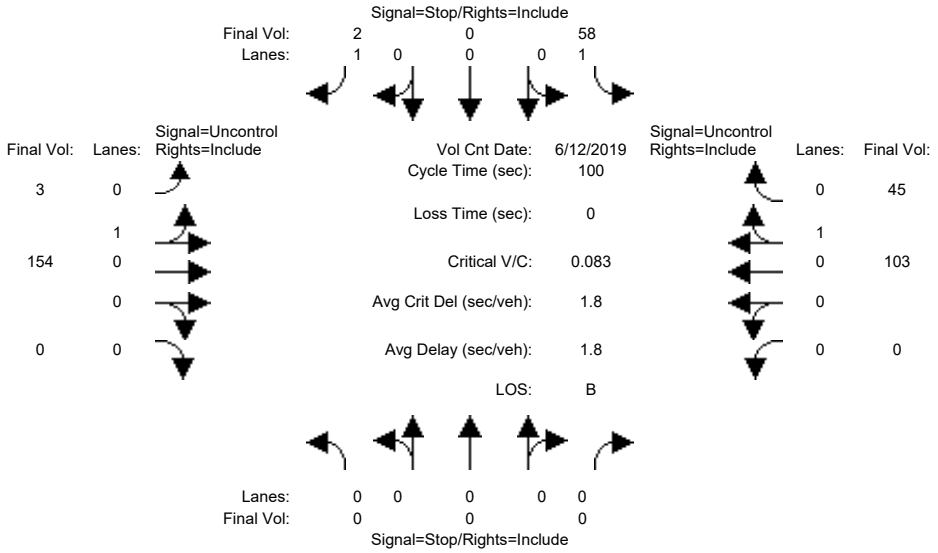
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_AM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0    36    0     1     2  114     0     0   89    39
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    36    0     1     2  114     0     0   89    39
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    36    0     1     2  114     0     0   89    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.62 0.62  0.62  0.74 0.74  0.74  0.86 0.86  0.86
PHF Volume:     0    0     0    58    0     2     3  154     0     0  103    45
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    58    0     2     3  154     0     0  103    45
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   286 xxxx   126   149 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   703 xxxx   922  1426 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   702 xxxx   922  1426 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.08 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   6.7 xxxx   0.1   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  10.6 xxxx   8.9   7.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     A     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             10.5           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    36    0     1     2  114     0     0   89    39
ApproachDel:    xxxxxx             10.5           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=37]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=281]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    36    0     1     2  114     0     0   89    39
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             244
Minor Approach Volume:           37
Minor Approach Volume Threshold: 736
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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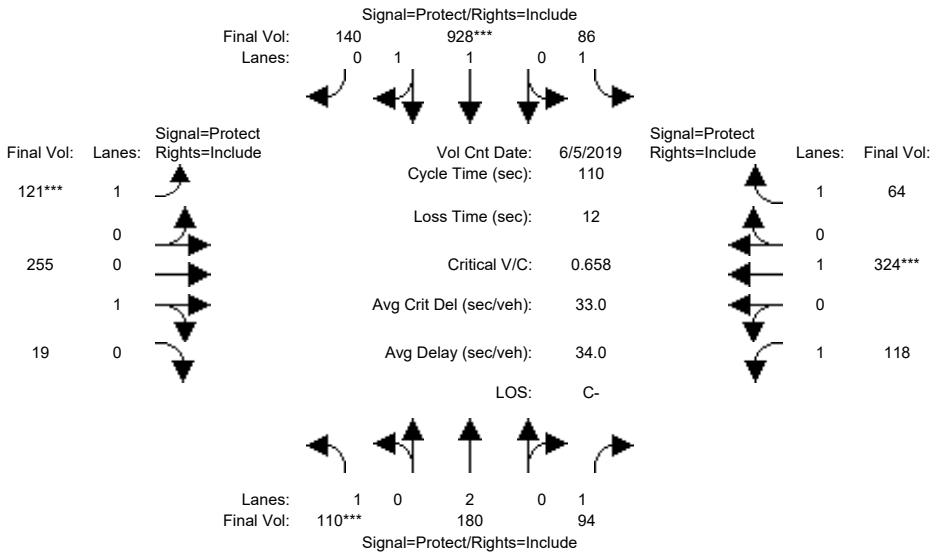
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BKG_PM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	94	169	88	83	891	127	101	211	16	117	305	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	169	88	83	891	127	101	211	16	117	305	63
Added Vol:	9	0	0	0	0	7	3	8	0	0	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	169	88	83	891	134	104	219	16	117	321	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.99	0.99	0.99
PHF Volume:	110	180	94	86	928	140	121	255	19	118	324	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	180	94	86	928	140	121	255	19	118	324	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	180	94	86	928	140	121	255	19	118	324	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.72	0.28	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3267	491	1750	1760	129	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.05	0.05	0.05	0.28	0.28	0.07	0.14	0.14	0.07	0.17	0.04
Crit Moves:	****				****		****				****	
Green Time:	10.5	32.2	32.2	25.8	47.5	47.5	11.5	26.7	26.7	13.4	28.5	28.5
Volume/Cap:	0.66	0.16	0.18	0.21	0.66	0.66	0.66	0.60	0.60	0.55	0.66	0.14
Uniform Del:	48.0	28.9	29.1	33.9	24.8	24.8	47.3	36.9	36.9	45.5	36.4	31.3
IncremntDel:	9.3	0.1	0.2	0.3	1.0	1.0	8.5	2.2	2.2	3.2	3.3	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	57.3	29.0	29.2	34.2	25.8	25.8	55.8	39.1	39.1	48.7	39.7	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.3	29.0	29.2	34.2	25.8	25.8	55.8	39.1	39.1	48.7	39.7	31.5
LOS by Move:	E+	C	C	C-	C	C	E+	D	D	D	D	C
HCM2kAvgQ:	128	56	64	60	351	351	137	221	221	121	266	45

Note: Queue reported is the distance per lane in feet.

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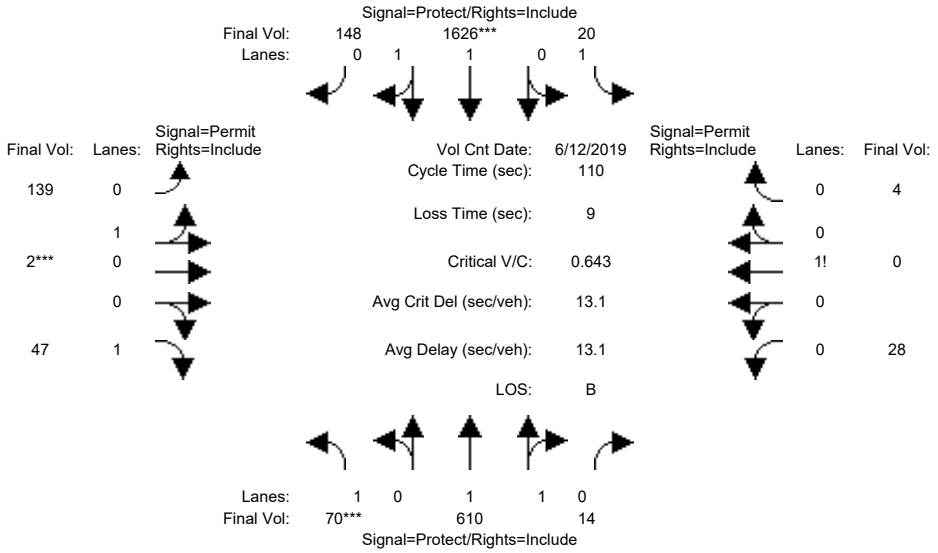
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BKG_PM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 12 Jun 2019 <<												
Base Vol:	60	522	12	19	1505	138	118	2	40	20	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	522	12	19	1505	138	118	2	40	20	0	3
Added Vol:	0	3	0	0	7	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	525	12	19	1512	138	118	2	40	20	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.93	0.93	0.93	0.85	0.85	0.85	0.72	0.72	0.72
PHF Volume:	70	610	14	20	1626	148	139	2	47	28	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	610	14	20	1626	148	139	2	47	28	0	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	610	14	20	1626	148	139	2	47	28	0	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.95	0.05	1.00	1.82	0.18	0.98	0.02	1.00	0.87	0.00	0.13
Final Sat.:	1750	3708	85	1750	3457	316	1723	29	1750	1522	0	228
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.16	0.01	0.47	0.47	0.08	0.08	0.03	0.02	0.00	0.02
Crit Moves:	****				****			****				
Green Time:	6.8	71.4	71.4	15.8	80.4	80.4	13.8	13.8	13.8	13.8	0.0	13.8
Volume/Cap:	0.64	0.25	0.25	0.08	0.64	0.64	0.64	0.64	0.21	0.15	0.00	0.15
Uniform Del:	50.4	8.1	8.1	40.8	7.5	7.5	45.8	45.8	43.2	42.9	0.0	42.9
IncremntDel:	12.5	0.1	0.1	0.1	0.5	0.5	6.4	6.4	0.5	0.3	0.0	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Delay/Veh:	62.9	8.1	8.1	41.0	8.0	8.0	52.2	52.2	43.7	43.2	0.0	43.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.9	8.1	8.1	41.0	8.0	8.0	52.2	52.2	43.7	43.2	0.0	43.2
LOS by Move:	E	A	A	D	A	A	D-	D-	D	D	A	D
HCM2kAvgQ:	66	108	108	17	390	390	151	151	42	28	0	28

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Note: Queue reported is the distance per lane in feet.

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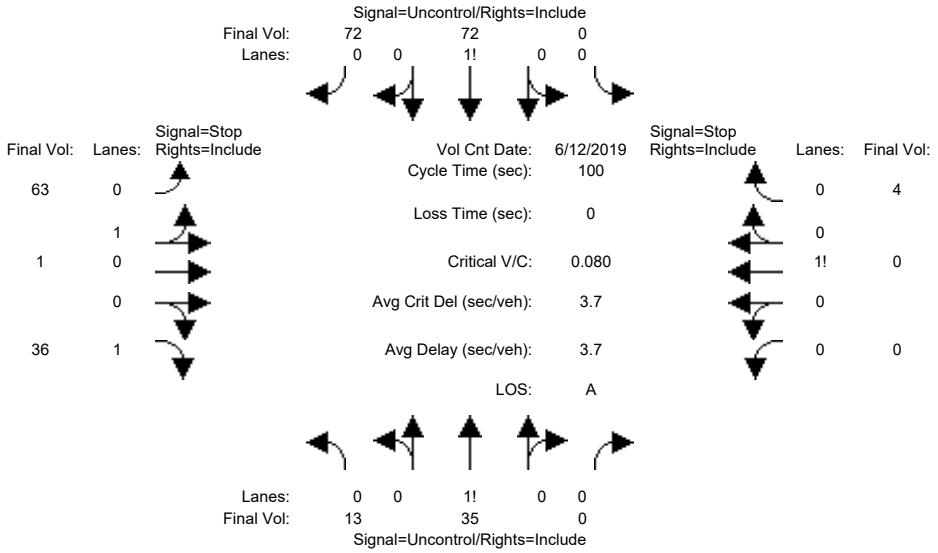
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_PM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                       Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:      10   26     0     0   57    57    59    1    34     0    0     1
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   10   26     0     0   57    57    59    1    34     0    0     1
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   10   26     0     0   57    57    59    1    34     0    0     1
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.75 0.75  0.75  0.79 0.79  0.79  0.94 0.94  0.94  0.25 0.25  0.25
PHF Volume:    13   35     0     0   72    72    63    1    36     0    0     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   13   35     0     0   72    72    63    1    36     0    0     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2 xxxxx xxxx   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  145 xxxx xxxxx  xxxx xxxx xxxxx   173  171   111  xxxx xxxx    35
Potent Cap.: 1449 xxxx xxxxx  xxxx xxxx xxxxx   793  724   945  xxxx xxxx  1044
Move Cap.:   1448 xxxx xxxxx  xxxx xxxx xxxxx   783  717   942  xxxx xxxx  1044
Volume/Cap:  0.01 xxxx  xxxx  xxxx xxxx  xxxx  0.08 0.00  0.04  xxxx xxxx  0.00
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.7 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   3.0  xxxx xxxx   0.3
Control Del:  7.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   9.0 xxxxx xxxx   8.5
LOS by Move:    A    *     *     *    *     *     *    *     A     *    *     A
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   782 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.5 xxxx xxxxx xxxxx xxxx xxxxx  10.0 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx              9.6              8.5
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   10   26     0     0   57    57    59    1    34     0    0     1
ApproachDel:    xxxxxx           xxxxxx              9.6              8.5
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=94]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=245]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=245]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   10   26     0     0   57    57    59    1    34     0    0     1
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             150
Minor Approach Volume:           94
Minor Approach Volume Threshold: 889
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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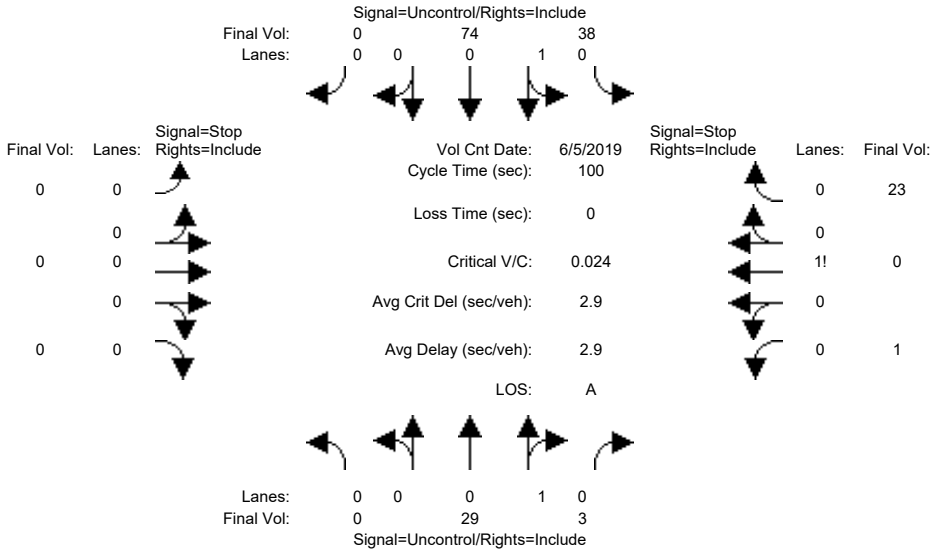
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_PM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   17     2    31   60     0     0    0     0     1    0    18
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   17     2    31   60     0     0    0     0     1    0    18
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   17     2    31   60     0     0    0     0     1    0    18
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.59 0.59  0.59  0.81 0.81  0.81  1.00 1.00  1.00  0.79 0.79  0.79
PHF Volume:     0   29     3    38   74     0     0    0     0     1    0    23
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   29     3    38   74     0     0    0     0     1    0    23
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    33 xxxx xxxxx  xxxx xxxx xxxxx   182  182    32
Potent Cap.: xxxx xxxx xxxxx  1592 xxxx xxxxx  xxxx xxxx xxxxx   812  716  1048
Move Cap.:   xxxx xxxx xxxxx  1590 xxxx xxxxx  xxxx xxxx xxxxx   796  697  1047
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.02
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.8 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx 1030 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.1 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.6 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.6
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   17     2    31   60     0     0    0     0     1    0    18
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.6
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=19]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=129]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   17     2    31   60     0     0    0     0     1    0    18
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             110
Minor Approach Volume:           19
Minor Approach Volume Threshold: 808
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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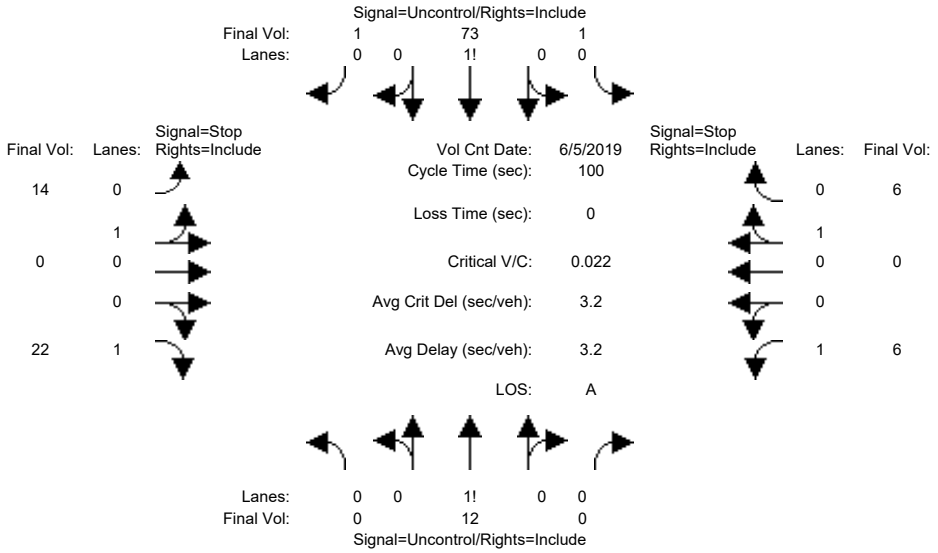
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_PM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    8     0     1   57     1     7    0    11     2    0     2
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    8     0     1   57     1     7    0    11     2    0     2
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    8     0     1   57     1     7    0    11     2    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.67 0.67  0.67  0.78 0.78  0.78  0.50 0.50  0.50  0.33 0.33  0.33
PHF Volume:     0   12     0     1   73     1    14    0    22     6    0     6
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   12     0     1   73     1    14    0    22     6    0     6
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    12 xxxx xxxxx    91   88    74    99   89    12
Potent Cap.: xxxx xxxx xxxxx  1620 xxxx xxxxx   898  806   994   887  805  1075
Move Cap.:   xxxx xxxx xxxxx  1620 xxxx xxxxx   892  805   994   867  804  1075
Volume/Cap:  xxxx xxxx  xxxx  0.00 xxxx  xxxx  0.02 0.00  0.02  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx   1.7   0.5 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.2 xxxx xxxxx xxxxx xxxx   8.7   9.2 xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   892 xxxx xxxxx  xxxx xxxx  1075
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   9.1 xxxx xxxxx xxxxx xxxx   8.4
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx              8.9              8.8
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    0    8     0     1   57     1     7    0    11     2    0     2
ApproachDel:    xxxxxx           xxxxxx              8.9              8.8
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=18]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=89]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=4]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=89]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    0    8     0     1   57     1     7    0    11     2    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             67
Minor Approach Volume:           18
Minor Approach Volume Threshold: 1143
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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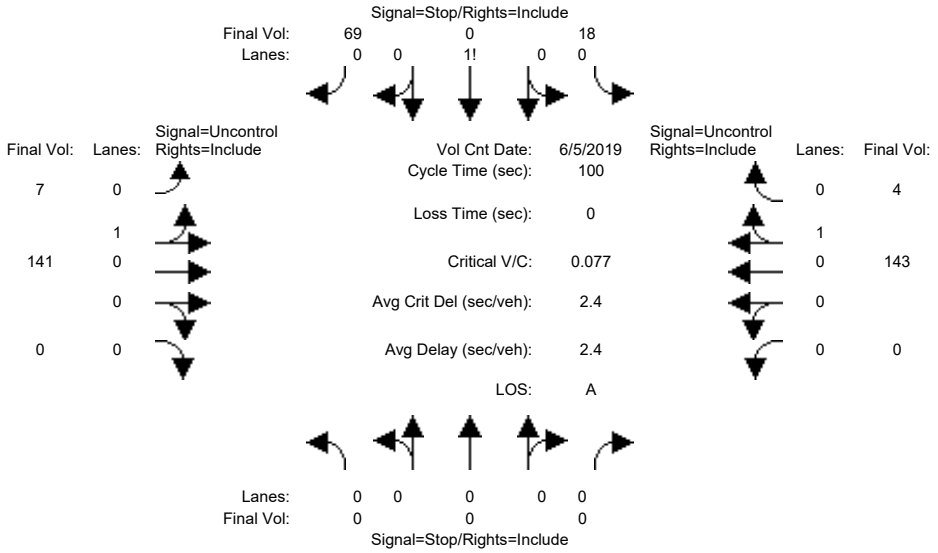
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_PM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    12    0    45     6  127     0     0  136     4
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    12    0    45     6  127     0     0  136     4
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    12    0    45     6  127     0     0  136     4
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.65 0.65  0.65  0.90 0.90  0.90  0.95 0.95  0.95
PHF Volume:     0    0     0    18    0    69     7  141     0     0  143     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    18    0    69     7  141     0     0  143     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   300  300   148   147 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   696  616   904  1441 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   693  613   902  1441 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.03 0.00  0.08  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.3 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  848 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.3 xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx  9.7 xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    A     *     A    *     *     *    *     *
ApproachDel:    xxxxxx              9.7           xxxxxx           xxxxxx
ApproachLOS:         *                A                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    12    0    45     6  127     0     0  136     4
ApproachDel:    xxxxxx              9.7           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=57]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=330]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    12    0    45     6  127     0     0  136     4
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             273
Minor Approach Volume:           57
Minor Approach Volume Threshold: 566
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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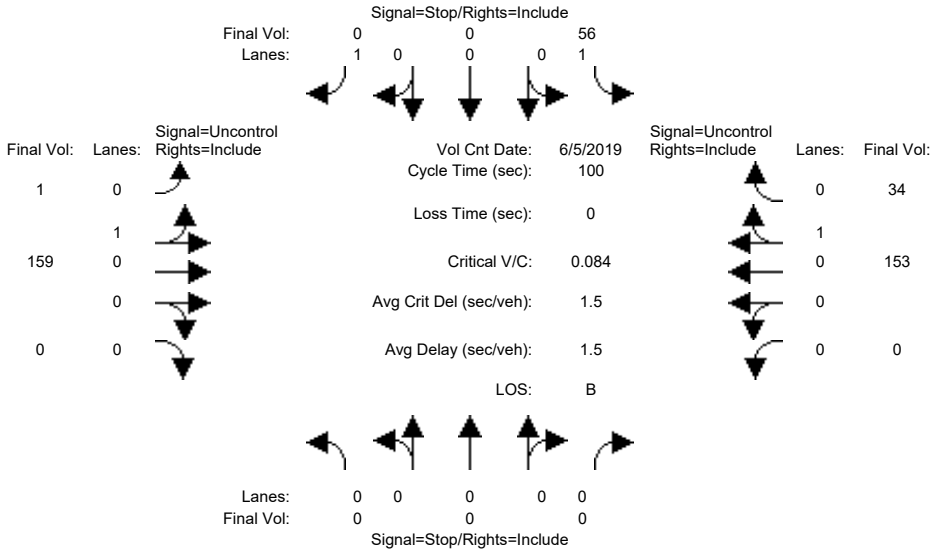
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG_PM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    45    0     0     1  140     0     0  138    31
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    45    0     0     1  140     0     0  138    31
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    45    0     0     1  140     0     0  138    31
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.80 0.80  0.80  0.88 0.88  0.88  0.90 0.90  0.90
PHF Volume:     0    0     0    56    0     0     1  159     0     0  153    34
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    56    0     0     1  159     0     0  153    34
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   332 xxxx   173   188 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   667 xxxx   876  1392 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   667 xxxx   875  1392 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.08 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   6.9 xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  10.9 xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             10.9           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    45    0     0     1  140     0     0  138    31
ApproachDel:    xxxxxx             10.9           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=45]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=355]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    45    0     0     1  140     0     0  138    31
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             310
Minor Approach Volume:           45
Minor Approach Volume Threshold: 661
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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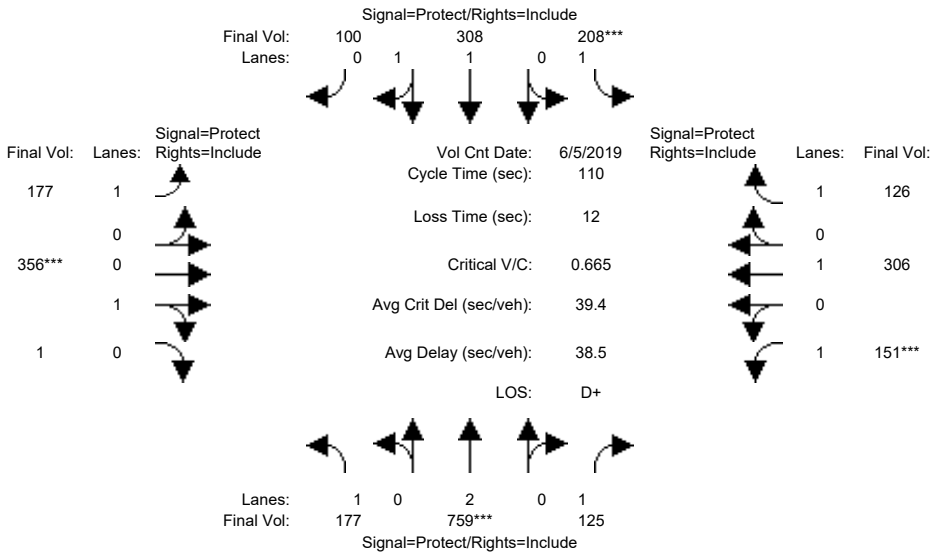
Kimley»Horn

E. BACKGROUND PLUS PROJECT CONDITIONS TRAFFIX OUTPUT SHEETS

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BKG+P_AM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.0	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	140	668	110	164	243	78	152	293	1	109	187	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	668	110	164	243	78	152	293	1	109	187	91
Added Vol:	16	0	0	0	0	1	0	13	0	0	33	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	156	668	110	164	243	79	152	306	1	109	220	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.79	0.79	0.79	0.86	0.86	0.86	0.72	0.72	0.72
PHF Volume:	177	759	125	208	308	100	177	356	1	151	306	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	177	759	125	208	308	100	177	356	1	151	306	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	177	759	125	208	308	100	177	356	1	151	306	126
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.48	0.52	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	2809	913	1750	1893	6	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.20	0.07	0.12	0.11	0.11	0.10	0.19	0.19	0.09	0.16	0.07
Crit Moves:		****		****				****		****		
Green Time:	25.3	33.0	33.0	19.6	27.3	27.3	17.5	31.1	31.1	14.3	27.9	27.9
Volume/Cap:	0.44	0.67	0.24	0.67	0.44	0.44	0.63	0.67	0.67	0.67	0.63	0.29
Uniform Del:	36.3	33.7	29.0	42.1	34.9	34.9	43.3	34.9	34.9	45.6	36.5	33.0
IncremntDel:	0.8	1.5	0.2	5.4	0.3	0.3	4.8	3.2	3.2	7.3	2.8	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	37.1	35.2	29.2	47.5	35.2	35.2	48.0	38.0	38.0	52.8	39.3	33.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.1	35.2	29.2	47.5	35.2	35.2	48.0	38.0	38.0	52.8	39.3	33.4
LOS by Move:	D+	D+	C	D	D+	D+	D	D+	D+	D-	D	C-
HCM2kAvgQ:	145	300	86	179	143	143	176	287	287	162	248	94

Note: Queue reported is the distance per lane in feet.

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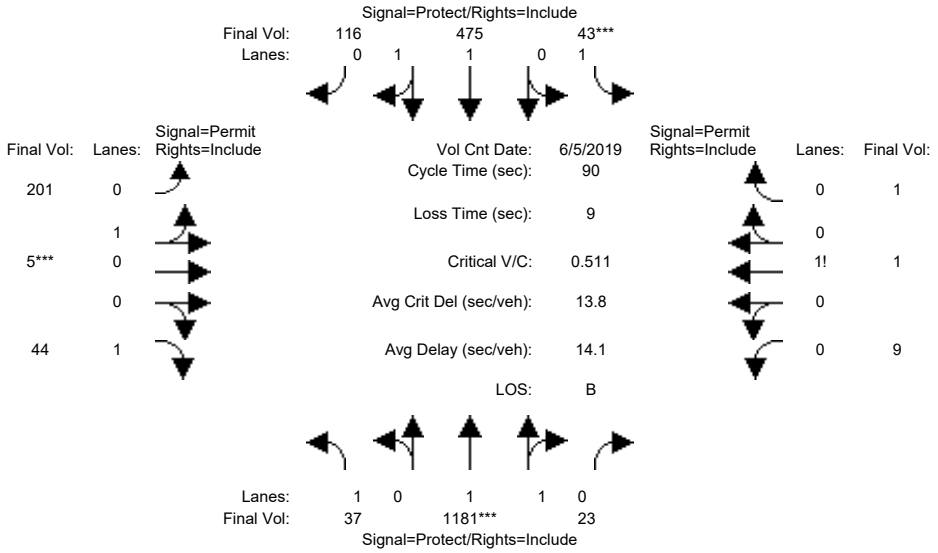
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BKG+P_AM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	33	1063	21	40	436	92	167	4	38	7	1	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	1063	21	40	436	92	167	4	38	7	1	1
Added Vol:	0	0	0	0	1	15	6	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1063	21	40	437	107	173	4	38	7	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.92	0.92	0.92	0.86	0.86	0.86	0.75	0.75	0.75
PHF Volume:	37	1181	23	43	475	116	201	5	44	9	1	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	1181	23	43	475	116	201	5	44	9	1	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	1181	23	43	475	116	201	5	44	9	1	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.96	0.04	1.00	1.58	0.42	0.98	0.02	1.00	0.79	0.10	0.11
Final Sat.:	1750	3720	73	1750	3002	735	1714	40	1750	1373	196	196
Capacity Analysis Module:												
Vol/Sat:	0.02	0.32	0.32	0.02	0.16	0.16	0.12	0.12	0.03	0.01	0.01	0.01
Crit Moves:		****		****				****				
Green Time:	13.2	55.9	55.9	4.4	47.1	47.1	20.7	20.7	20.7	20.7	20.7	20.7
Volume/Cap:	0.14	0.51	0.51	0.51	0.30	0.30	0.51	0.51	0.11	0.03	0.03	0.03
Uniform Del:	33.4	9.4	9.4	41.8	12.2	12.2	30.2	30.2	27.4	26.9	26.9	26.9
IncremntDel:	0.3	0.2	0.2	5.1	0.1	0.1	1.1	1.1	0.1	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	33.7	9.6	9.6	46.9	12.2	12.2	31.3	31.3	27.5	26.9	26.9	26.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.7	9.6	9.6	46.9	12.2	12.2	31.3	31.3	27.5	26.9	26.9	26.9
LOS by Move:	C-	A	A	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	23	223	223	51	117	117	147	147	27	7	7	7

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Note: Queue reported is the distance per lane in feet.

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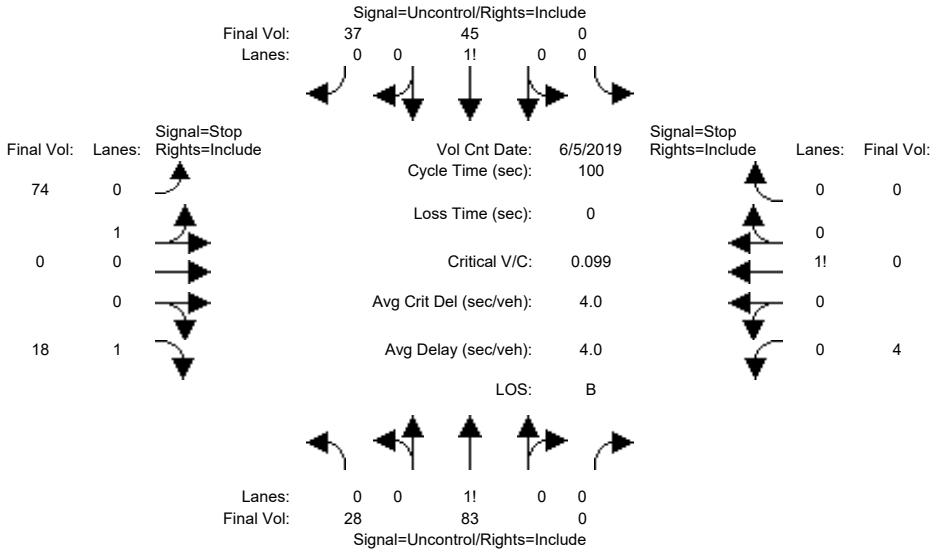
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_AM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                        Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:      24   66     0     0   22    31    42    0    10     1    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   24   66     0     0   22    31    42    0    10     1    0     0
Added Vol:      0    6     0     0   15     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   24   72     0     0   37    31    42    0    10     1    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.87 0.87  0.87  0.83 0.83  0.83  0.57 0.57  0.57  0.25 0.25  0.25
PHF Volume:    28   83     0     0   45    37    74    0    18     4    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   28   83     0     0   45    37    74    0    18     4    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1 xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   82 xxxx xxxxx  xxxx xxxx xxxxx   201  201    63   210 xxxx xxxxx
Potent Cap.: 1528 xxxx xxxxx  xxxx xxxx xxxxx   757  695  1001   752 xxxx xxxxx
Move Cap.:   1528 xxxx xxxxx  xxxx xxxx xxxxx   747  682  1001   728 xxxx xxxxx
Volume/Cap:  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.10 0.00  0.02  0.01 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.4 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   1.3   0.4 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.7  10.0 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   747 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.3 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             10.0             10.0
ApproachLOS:         *                *                B                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   24   72     0     0   37    31    42    0    10     1    0     0
ApproachDel:    xxxxxx           xxxxxx             10.0             10.0
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=52]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=217]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=217]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   24   72     0     0   37    31    42    0    10     1    0     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             164
Minor Approach Volume:           52
Minor Approach Volume Threshold: 861
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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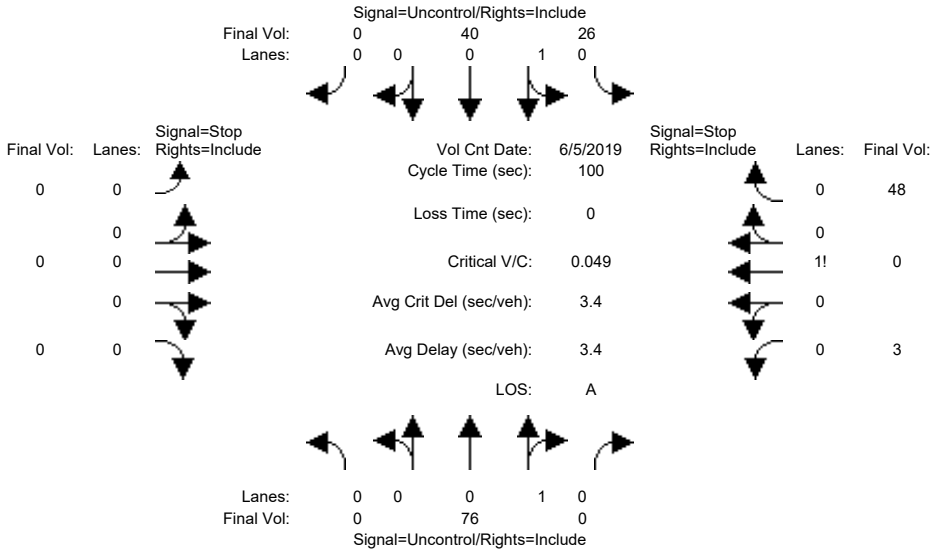
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_AM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   54     0    18   12     0     0    0     0     2    0    29
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   54     0    18   12     0     0    0     0     2    0    29
Added Vol:      0    6     0     0   15     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   60     0    18   27     0     0    0     0     2    0    29
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.79 0.79  0.79  0.68 0.68  0.68  1.00 1.00  1.00  0.60 0.60  0.60
PHF Volume:     0   76     0    26   40     0     0    0     0     3    0    48
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   76     0    26   40     0     0    0     0     3    0    48
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    76 xxxx xxxxx  xxxx xxxx xxxxx   169  169    76
Potent Cap.: xxxx xxxx xxxxx  1517 xxxx xxxxx  xxxx xxxx xxxxx   826  728   991
Move Cap.:   xxxx xxxx xxxxx  1517 xxxx xxxxx  xxxx xxxx xxxxx   815  715   991
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.05
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.3 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  977 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.2 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.9 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.9
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   60     0    18   27     0     0    0     0     2    0    29
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.9
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=31]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=136]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   60     0    18   27     0     0    0     0     2    0    29
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             105
Minor Approach Volume:           31
Minor Approach Volume Threshold: 820
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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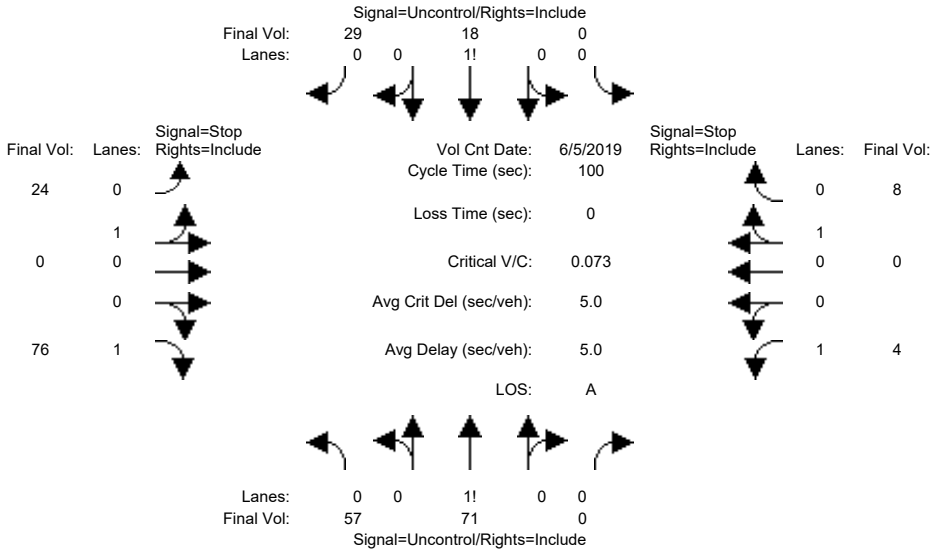
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_AM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       1   58     0     0   10     1     0    0     1     1    0     2
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    1   58     0     0   10     1     0    0     1     1    0     2
Added Vol:     46    0     0     0    0    15     6    0    18     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   47   58     0     0   10    16     6    0    19     1    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.82 0.82  0.82  0.55 0.55  0.55  0.25 0.25  0.25  0.25 0.25  0.25
PHF Volume:    57   71     0     0   18    29    24    0    76     4    0     8
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   57   71     0     0   18    29    24    0    76     4    0     8
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   47 xxxx xxxxx  xxxx xxxx xxxxx   222  218    33   256  233    71
Potent Cap.: 1554 xxxx xxxxx  xxxx xxxx xxxxx   738  684  1047   701  671   997
Move Cap.:   1554 xxxx xxxxx  xxxx xxxx xxxxx   711  658  1047   631  645   997
Volume/Cap:  0.04 xxxx  xxxx  xxxx xxxx  xxxx  0.03 0.00  0.07  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    2.9 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   5.9   0.5 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.7  10.7 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     B    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   711 xxxx xxxxx  xxxx xxxx   997
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.2 xxxx xxxxx xxxxx xxxx   8.6
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx              9.1              9.3
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   47   58     0     0   10    16     6    0    19     1    0     2
ApproachDel:    xxxxxx           xxxxxx              9.1              9.3
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=25]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=159]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=3]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=159]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   47   58     0     0   10    16     6    0    19     1    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             131
Minor Approach Volume:           25
Minor Approach Volume Threshold: 932
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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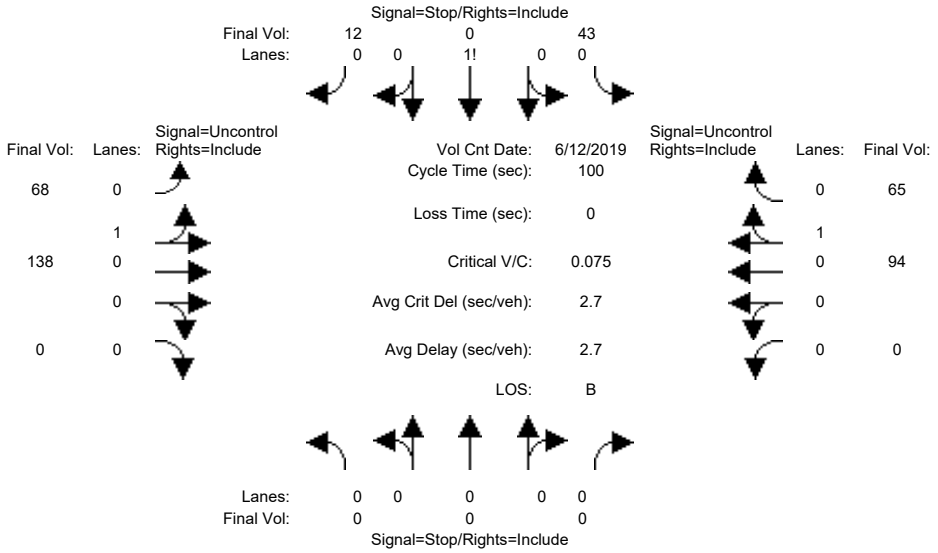
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_AM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0     7    0     7    52  106     0     0   74     5
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     7    0     7    52  106     0     0   74     5
Added Vol:      0    0     0    18    0     0     0    0     0     0    0    46
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    25    0     7    52  106     0     0   74    51
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.58 0.58  0.58  0.77 0.77  0.77  0.79 0.79  0.79
PHF Volume:     0    0     0    43    0    12    68  138     0     0   94    65
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    43    0    12    68  138     0     0   94    65
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.5  6.6   6.3   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.6  4.1   3.4   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   399  399   126   158 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   597  532   911  1415 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   575  505   911  1415 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.08 0.00  0.01  0.05 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   3.8 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  625 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.3 xxxxx   0.2 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 11.3 xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             11.3           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    25    0     7    52  106     0     0   74    51
ApproachDel:    xxxxxx             11.3           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=32]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=315]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    25    0     7    52  106     0     0   74    51
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             283
Minor Approach Volume:           32
Minor Approach Volume Threshold: 556
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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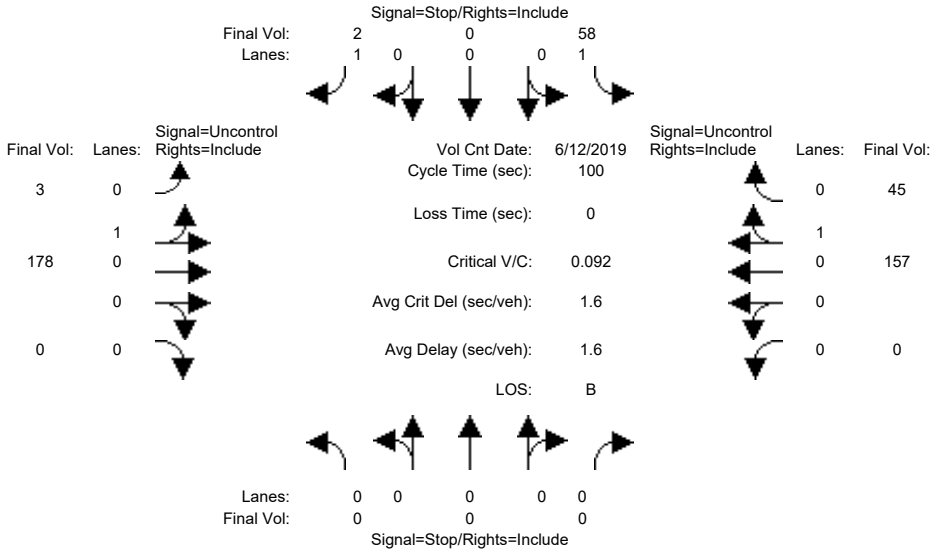
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_AM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0    36    0     1     2  114     0     0   89    39
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    36    0     1     2  114     0     0   89    39
Added Vol:      0    0     0     0    0     0     0   18     0     0   46     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    36    0     1     2  132     0     0  135    39
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.62 0.62  0.62  0.74 0.74  0.74  0.86 0.86  0.86
PHF Volume:     0    0     0    58    0     2     3  178     0     0  157    45
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    58    0     2     3  178     0     0  157    45
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   363 xxxx   180   202 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   634 xxxx   861  1364 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   633 xxxx   861  1364 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.09 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   7.5 xxxx   0.1   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  11.3 xxxx   9.2   7.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     A     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             11.2           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    36    0     1     2  132     0     0  135    39
ApproachDel:    xxxxxx             11.2           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=37]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=345]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    36    0     1     2  132     0     0  135    39
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             308
Minor Approach Volume:           37
Minor Approach Volume Threshold: 663
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
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signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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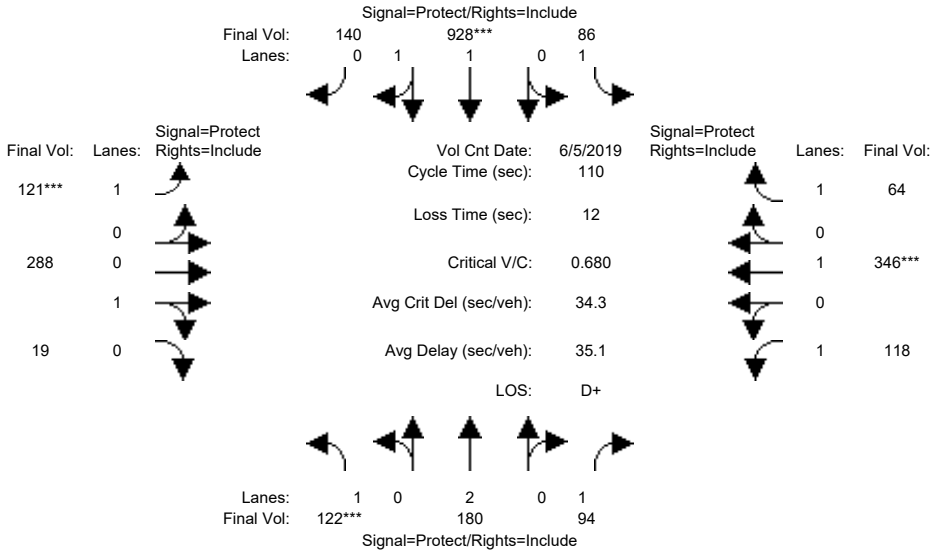
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BKG+P_PM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	94	169	88	83	891	127	101	211	16	117	305	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	169	88	83	891	127	101	211	16	117	305	63
Added Vol:	21	0	0	0	0	7	3	37	0	0	38	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	169	88	83	891	134	104	248	16	117	343	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.99	0.99	0.99
PHF Volume:	122	180	94	86	928	140	121	288	19	118	346	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	180	94	86	928	140	121	288	19	118	346	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	122	180	94	86	928	140	121	288	19	118	346	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.72	0.28	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3267	491	1750	1776	115	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.05	0.05	0.28	0.28	0.07	0.16	0.16	0.07	0.18	0.04
Crit Moves:	****				****		****				****	
Green Time:	11.3	31.8	31.8	25.5	46.0	46.0	11.2	28.1	28.1	12.6	29.5	29.5
Volume/Cap:	0.68	0.16	0.18	0.21	0.68	0.68	0.68	0.64	0.64	0.59	0.68	0.14
Uniform Del:	47.6	29.2	29.3	34.2	26.0	26.0	47.7	36.4	36.4	46.3	36.0	30.6
IncremntDel:	10.1	0.1	0.2	0.3	1.2	1.2	10.2	2.8	2.8	4.6	3.7	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	57.7	29.2	29.5	34.4	27.2	27.2	57.8	39.2	39.2	50.9	39.7	30.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.7	29.2	29.5	34.4	27.2	27.2	57.8	39.2	39.2	50.9	39.7	30.7
LOS by Move:	E+	C	C	C-	C	C	E+	D	D	D	D	C
HCM2kAvgQ:	141	56	64	60	360	360	140	250	250	125	285	44

Note: Queue reported is the distance per lane in feet.

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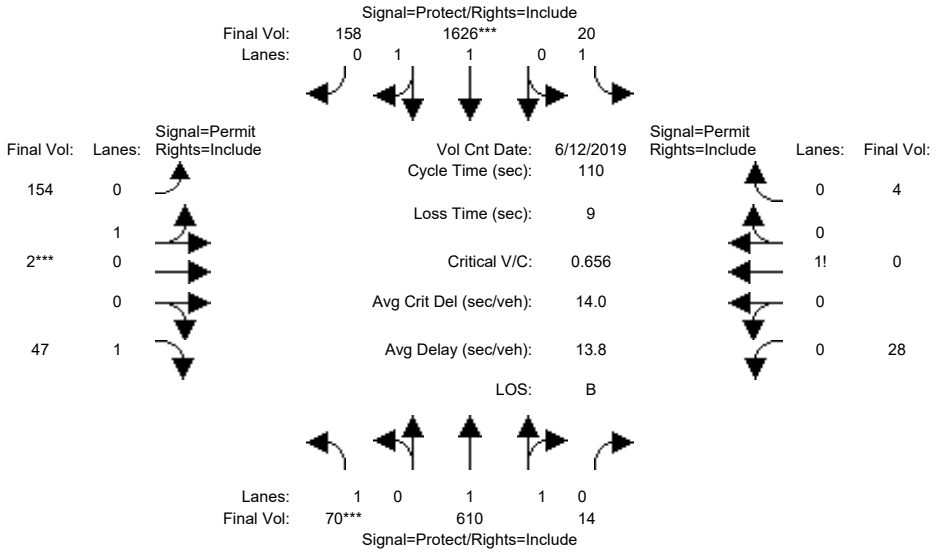
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BKG+P_PM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 12 Jun 2019 <<												
Base Vol:	60	522	12	19	1505	138	118	2	40	20	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	522	12	19	1505	138	118	2	40	20	0	3
Added Vol:	0	3	0	0	7	9	13	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	525	12	19	1512	147	131	2	40	20	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.93	0.93	0.93	0.85	0.85	0.85	0.72	0.72	0.72
PHF Volume:	70	610	14	20	1626	158	154	2	47	28	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	610	14	20	1626	158	154	2	47	28	0	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	610	14	20	1626	158	154	2	47	28	0	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.95	0.05	1.00	1.81	0.19	0.99	0.01	1.00	0.87	0.00	0.13
Final Sat.:	1750	3708	85	1750	3437	334	1726	26	1750	1522	0	228
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.16	0.01	0.47	0.47	0.09	0.09	0.03	0.02	0.00	0.02
Crit Moves:	****				****			****				
Green Time:	6.7	70.5	70.5	15.6	79.3	79.3	15.0	15.0	15.0	15.0	0.0	15.0
Volume/Cap:	0.66	0.26	0.26	0.08	0.66	0.66	0.66	0.66	0.20	0.13	0.00	0.13
Uniform Del:	50.5	8.5	8.5	41.0	8.1	8.1	45.1	45.1	42.2	41.8	0.0	41.8
IncremntDel:	13.9	0.1	0.1	0.1	0.6	0.6	6.5	6.5	0.4	0.3	0.0	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Delay/Veh:	64.4	8.6	8.6	41.2	8.7	8.7	51.5	51.5	42.6	42.1	0.0	42.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.4	8.6	8.6	41.2	8.7	8.7	51.5	51.5	42.6	42.1	0.0	42.1
LOS by Move:	E	A	A	D	A	A	D-	D-	D	D	A	D
HCM2kAvgQ:	66	110	110	17	409	409	164	164	41	27	0	27

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Note: Queue reported is the distance per lane in feet.

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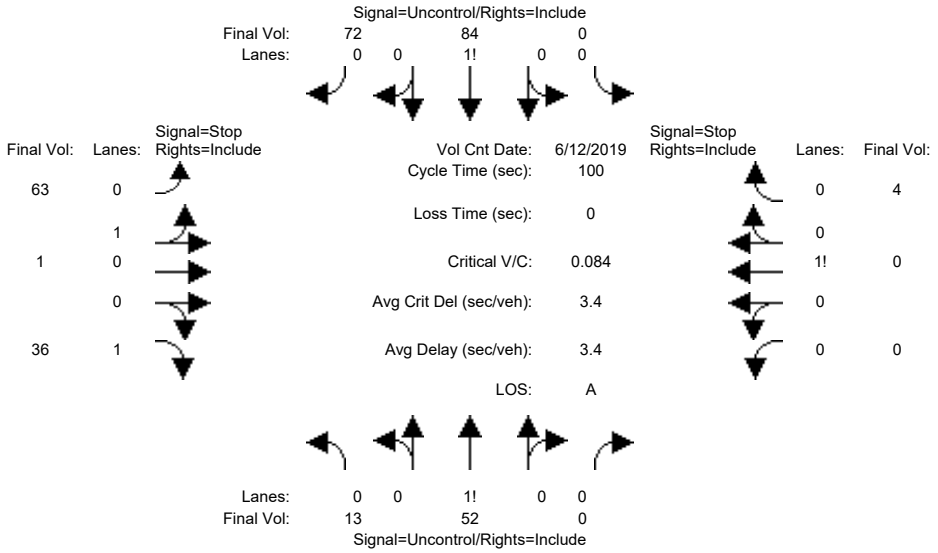
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_PM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                        Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:      10   26     0     0   57    57    59    1    34     0    0     1
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   10   26     0     0   57    57    59    1    34     0    0     1
Added Vol:      0   13     0     0    9     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   10   39     0     0   66    57    59    1    34     0    0     1
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.75 0.75  0.75  0.79 0.79  0.79  0.94 0.94  0.94  0.25 0.25  0.25
PHF Volume:    13   52     0     0   84    72    63    1    36     0    0     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   13   52     0     0   84    72    63    1    36     0    0     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2 xxxxx xxxx   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  157 xxxx xxxxx  xxxx xxxx xxxxx   201  199   123  xxxx xxxx    52
Potent Cap.: 1436 xxxx xxxxx  xxxx xxxx xxxxx   759  698   931  xxxx xxxx  1021
Move Cap.:   1434 xxxx xxxxx  xxxx xxxx xxxxx   750  691   929  xxxx xxxx  1021
Volume/Cap:  0.01 xxxx  xxxx  xxxx xxxx  xxxx  0.08 0.00  0.04  xxxx xxxx  0.00
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.7 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   3.0  xxxx xxxx   0.3
Control Del:  7.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   9.0 xxxxx xxxx   8.5
LOS by Move:    A    *     *     *    *     *     *    *     A     *    *     A
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   749 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.5 xxxx xxxxx xxxxx xxxx xxxxx  10.3 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx              9.8              8.5
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   10   39     0     0   66    57    59    1    34     0    0     1
ApproachDel:    xxxxxx           xxxxxx              9.8              8.5
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=94]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=267]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=267]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   10   39     0     0   66    57    59    1    34     0    0     1
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             172
Minor Approach Volume:           94
Minor Approach Volume Threshold: 846
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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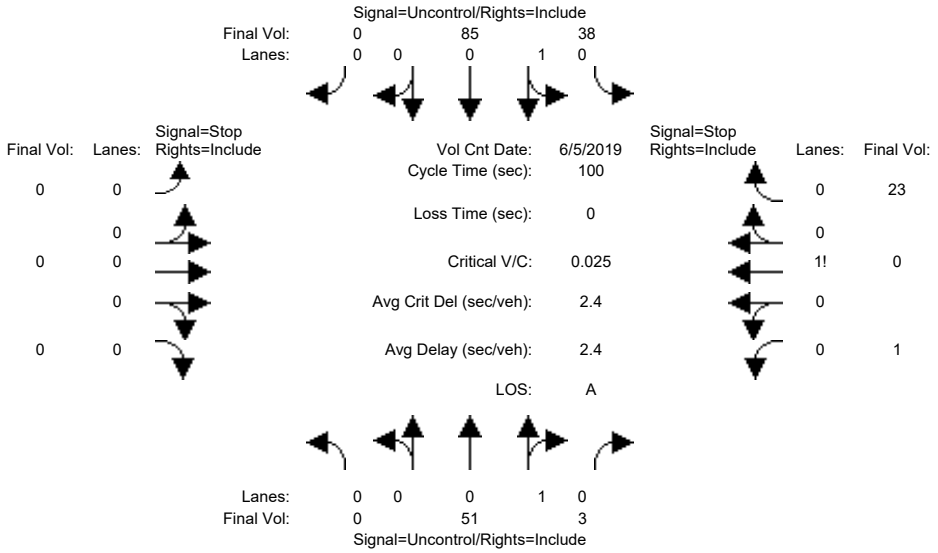
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_PM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   17     2    31   60     0     0    0     0     1    0    18
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0   17     2    31   60     0     0    0     0     1    0    18
Added Vol:      0   13     0     0    9     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   30     2    31   69     0     0    0     0     1    0    18
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.59 0.59  0.59  0.81 0.81  0.81  1.00 1.00  1.00  0.79 0.79  0.79
PHF Volume:     0   51     3    38   85     0     0    0     0     1    0    23
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   51     3    38   85     0     0    0     0     1    0    23
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    55 xxxx xxxxx  xxxx xxxx xxxxx   215  215    54
Potent Cap.: xxxx xxxx xxxxx  1563 xxxx xxxxx  xxxx xxxx xxxxx   777  686  1019
Move Cap.:   xxxx xxxx xxxxx  1561 xxxx xxxxx  xxxx xxxx xxxxx   762  668  1019
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.02
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.9 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx 1001 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.1 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.7 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.7
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   30     2    31   69     0     0    0     0     1    0    18
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.7
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=19]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=151]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   30     2    31   69     0     0    0     0     1    0    18
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             132
Minor Approach Volume:           19
Minor Approach Volume Threshold: 759
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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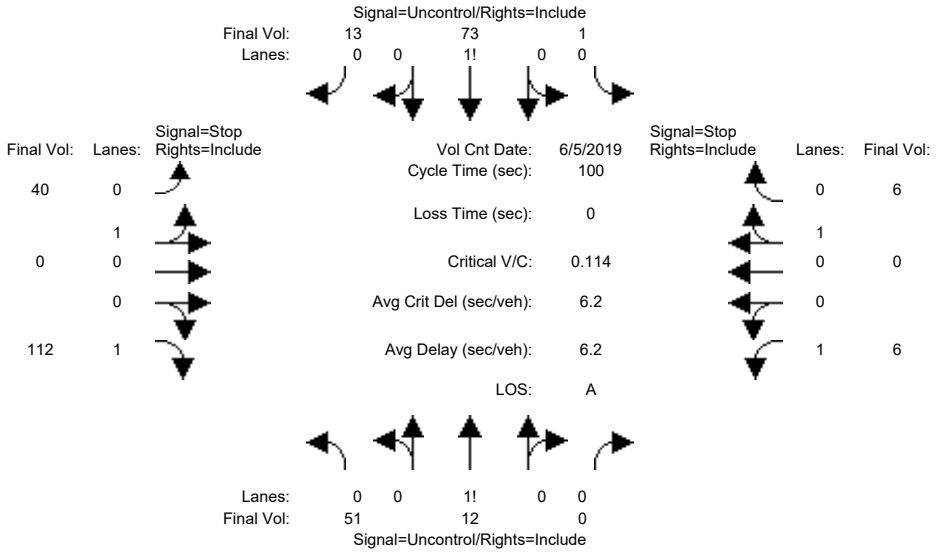
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_PM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    8     0     1   57     1     7    0    11     2    0     2
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    8     0     1   57     1     7    0    11     2    0     2
Added Vol:     34    0     0     0    0     9    13    0    45     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   34    8     0     1   57    10    20    0    56     2    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.67 0.67  0.67  0.78 0.78  0.78  0.50 0.50  0.50  0.33 0.33  0.33
PHF Volume:    51   12     0     1   73    13    40    0   112     6    0     6
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   51   12     0     1   73    13    40    0   112     6    0     6
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx   4.1 xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:  2.2 xxxx xxxxx   2.2 xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   86 xxxx xxxxx    12 xxxx xxxxx   199  195    79   251  202    12
Potent Cap.: 1523 xxxx xxxxx  1620 xxxx xxxxx   765  704   986   706  698  1075
Move Cap.:   1523 xxxx xxxxx  1620 xxxx xxxxx   740  679   986   609  673  1075
Volume/Cap:  0.03 xxxx  xxxx  0.00 xxxx  xxxx  0.05 0.00  0.11  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    2.6 xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx   9.6   0.8 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx   7.2 xxxx xxxxx xxxxx xxxx   9.1  11.0 xxxx xxxxx
LOS by Move:    A    *     *     A    *     *     *    *     A     B    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   740 xxxx xxxxx  xxxx xxxx  1075
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.1 xxxx xxxxx xxxxx xxxx   8.4
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx              9.4              9.7
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   34    8     0     1   57    10    20    0    56     2    0     2
ApproachDel:    xxxxxx           xxxxxx              9.4              9.7
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=76]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=190]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=4]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=190]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   34    8     0     1   57    10    20    0    56     2    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             110
Minor Approach Volume:           76
Minor Approach Volume Threshold: 987
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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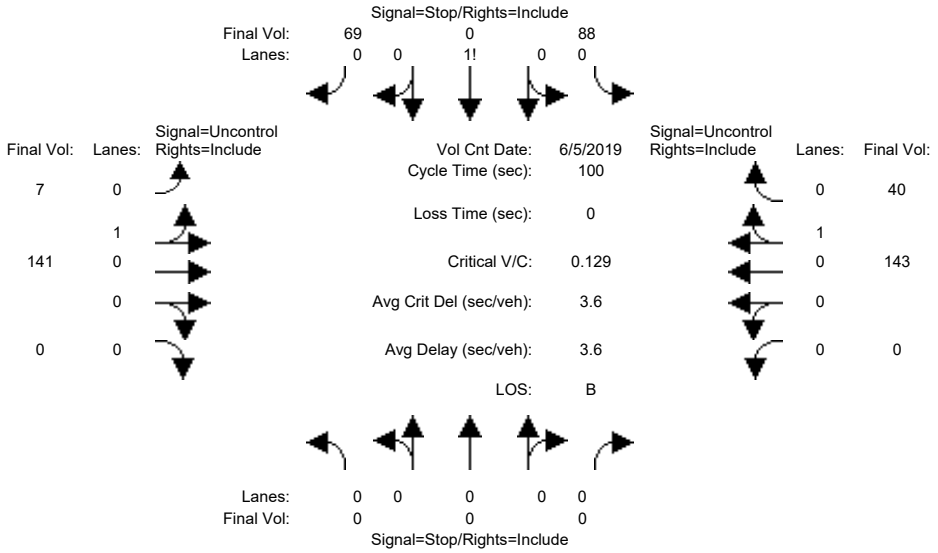
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_PM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    12    0    45     6  127     0     0  136     4
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    12    0    45     6  127     0     0  136     4
Added Vol:      0    0     0    45    0     0     0    0     0     0    0    34
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    57    0    45     6  127     0     0  136    38
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.65 0.65  0.65  0.90 0.90  0.90  0.95 0.95  0.95
PHF Volume:     0    0     0    88    0    69     7  141     0     0  143    40
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    88    0    69     7  141     0     0  143    40
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   318  318   166   183 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   680  602   883  1398 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   677  599   881  1398 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.13 0.00  0.08  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.4 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  754 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.8 xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 11.0 xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             11.0           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    57    0    45     6  127     0     0  136    38
ApproachDel:    xxxxxx             11.0           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=102]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=409]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    57    0    45     6  127     0     0  136    38
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             307
Minor Approach Volume:           102
Minor Approach Volume Threshold: 534
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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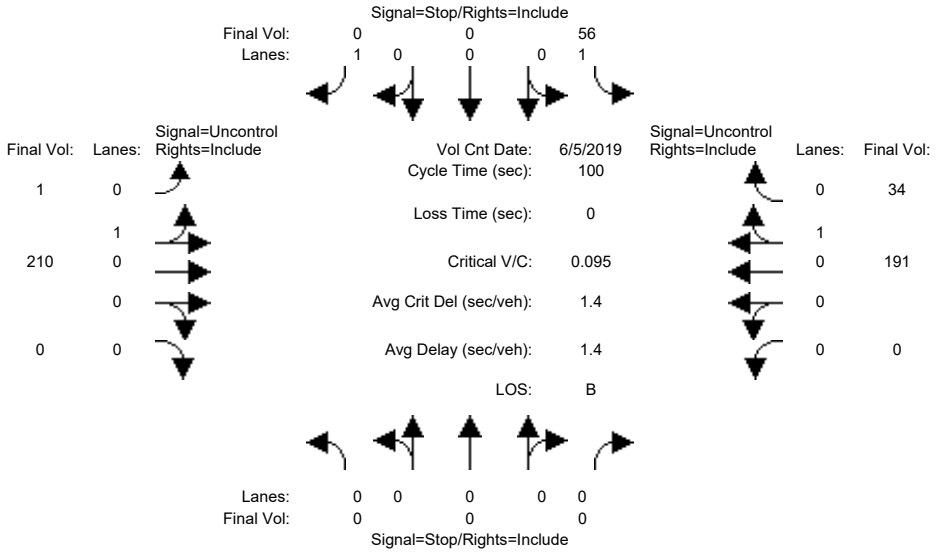
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BKG+P_PM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    45    0     0     1  140     0     0  138    31
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    45    0     0     1  140     0     0  138    31
Added Vol:      0    0     0     0    0     0     0   45     0     0   34     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    45    0     0     1  185     0     0  172    31
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.80 0.80  0.80  0.88 0.88  0.88  0.90 0.90  0.90
PHF Volume:     0    0     0    56    0     0     1  210     0     0  191    34
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    56    0     0     1  210     0     0  191    34
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   421 xxxx   210   226 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   593 xxxx   835  1349 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   593 xxxx   834  1349 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.09 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   7.8 xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  11.7 xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             11.7           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    45    0     0     1  185     0     0  172    31
ApproachDel:    xxxxxx             11.7           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=45]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=434]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    45    0     0     1  185     0     0  172    31
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             389
Minor Approach Volume:           45
Minor Approach Volume Threshold: 590
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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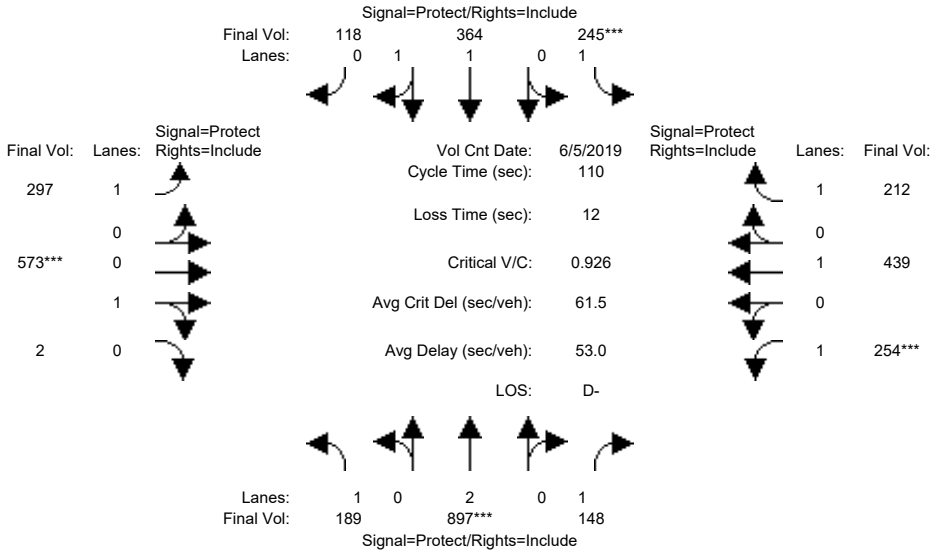
Kimley»Horn

F. CUMULATIVE CONDITIONS TRAFFIX OUTPUT SHEETS

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CU_AM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.0	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	140	668	110	164	243	78	152	293	1	109	187	91
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.68	1.68	1.68	1.68	1.68	1.68
Initial Bse:	165	790	130	194	287	92	255	492	2	183	314	153
Added Vol:	1	0	0	0	0	1	0	1	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	166	790	130	194	287	93	255	493	2	183	316	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.79	0.79	0.79	0.86	0.86	0.86	0.72	0.72	0.72
PHF Volume:	189	897	148	245	364	118	297	573	2	254	439	212
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	897	148	245	364	118	297	573	2	254	439	212
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	189	897	148	245	364	118	297	573	2	254	439	212
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.48	0.52	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	2810	912	1750	1893	6	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.24	0.08	0.14	0.13	0.13	0.17	0.30	0.30	0.15	0.23	0.12
Crit Moves:		****		****				****		****		
Green Time:	20.4	28.1	28.1	16.7	24.4	24.4	22.6	36.0	36.0	17.3	30.7	30.7
Volume/Cap:	0.58	0.93	0.33	0.93	0.58	0.58	0.83	0.93	0.93	0.93	0.83	0.43
Uniform Del:	41.0	39.9	33.3	46.1	38.3	38.3	41.9	35.7	35.7	45.7	37.2	32.5
IncremntDel:	2.7	14.3	0.4	35.9	1.1	1.1	14.6	19.9	19.9	35.1	10.4	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	43.7	54.2	33.8	81.9	39.4	39.4	56.5	55.6	55.6	80.8	47.5	33.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.7	54.2	33.8	81.9	39.4	39.4	56.5	55.6	55.6	80.8	47.5	33.1
LOS by Move:	D	D-	C-	F	D	D	E+	E+	E+	F	D	C-
HCM2kAvgQ:	176	473	112	259	183	183	321	576	576	324	405	163

Note: Queue reported is the distance per lane in feet.

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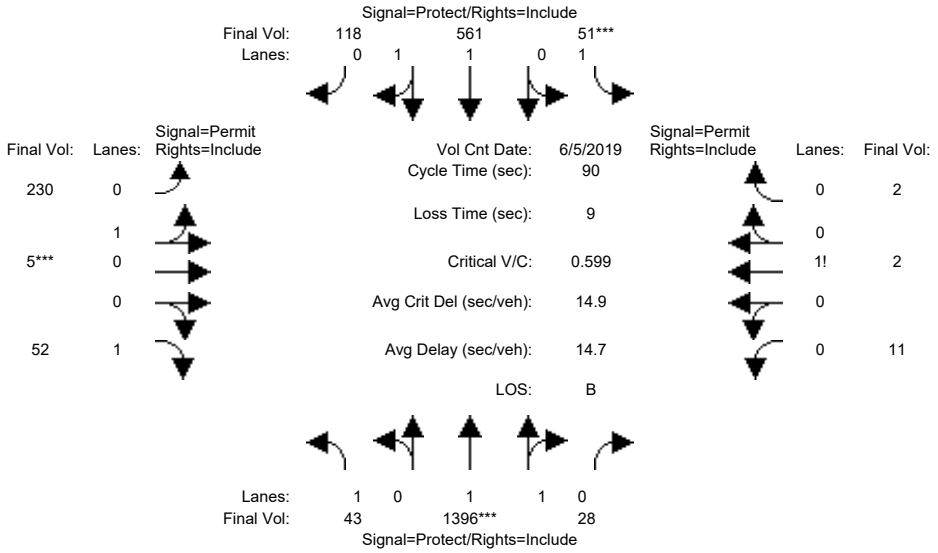
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CU_AM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	33	1063	21	40	436	92	167	4	38	7	1	1
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Initial Bse:	39	1257	25	47	515	109	197	5	45	8	1	1
Added Vol:	0	0	0	0	1	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	1257	25	47	516	109	197	5	45	8	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.92	0.92	0.92	0.86	0.86	0.86	0.75	0.75	0.75
PHF Volume:	43	1396	28	51	561	118	230	5	52	11	2	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	1396	28	51	561	118	230	5	52	11	2	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	1396	28	51	561	118	230	5	52	11	2	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.96	0.04	1.00	1.63	0.37	0.98	0.02	1.00	0.79	0.10	0.11
Final Sat.:	1750	3720	73	1750	3093	651	1712	41	1750	1373	196	196
Capacity Analysis Module:												
Vol/Sat:	0.02	0.38	0.38	0.03	0.18	0.18	0.13	0.13	0.03	0.01	0.01	0.01
Crit Moves:		****		****				****				
Green Time:	12.0	56.4	56.4	4.4	48.9	48.9	20.2	20.2	20.2	20.2	20.2	20.2
Volume/Cap:	0.19	0.60	0.60	0.60	0.33	0.33	0.60	0.60	0.13	0.04	0.04	0.04
Uniform Del:	34.7	10.0	10.0	41.9	11.5	11.5	31.3	31.3	27.9	27.3	27.3	27.3
IncremntDel:	0.4	0.4	0.4	11.1	0.1	0.1	2.5	2.5	0.2	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	35.1	10.4	10.4	53.0	11.6	11.6	33.8	33.8	28.1	27.4	27.4	27.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.1	10.4	10.4	53.0	11.6	11.6	33.8	33.8	28.1	27.4	27.4	27.4
LOS by Move:	D+	B+	B+	D-	B+	B+	C-	C-	C	C	C	C
HCM2kAvgQ:	27	274	274	64	133	133	178	178	32	8	8	8

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Note: Queue reported is the distance per lane in feet.

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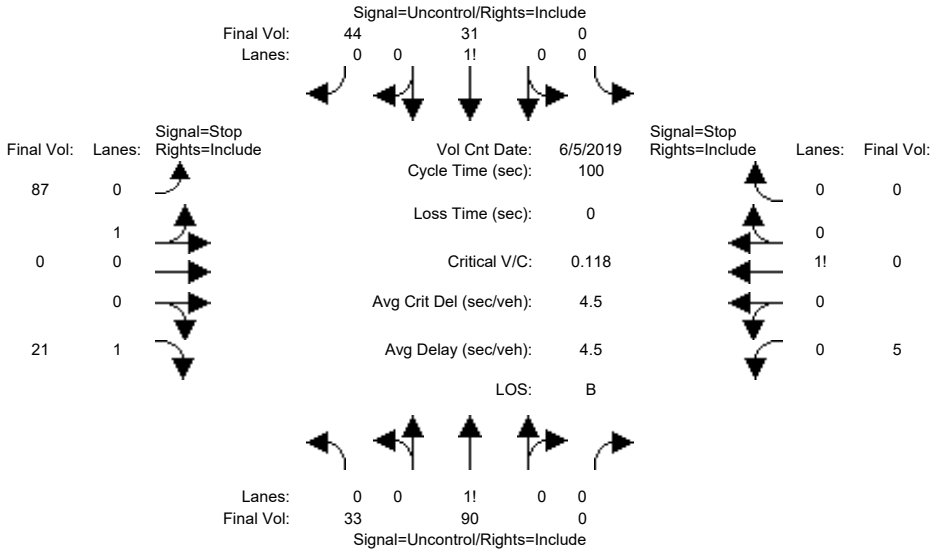
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_AM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                       Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:      24   66     0     0   22    31    42    0    10     1    0     0
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:   28   78     0     0   26    37    50    0    12     1    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   28   78     0     0   26    37    50    0    12     1    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.87 0.87  0.87  0.83 0.83  0.83  0.57 0.57  0.57  0.25 0.25  0.25
PHF Volume:    33   90     0     0   31    44    87    0    21     5    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   33   90     0     0   31    44    87    0    21     5    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1 xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   75 xxxx xxxxx  xxxx xxxx xxxxx   208  208    53   219 xxxx xxxxx
Potent Cap.: 1536 xxxx xxxxx  xxxx xxxx xxxxx   749  689  1014   742 xxxx xxxxx
Move Cap.:   1536 xxxx xxxxx  xxxx xxxx xxxxx   737  674  1014   715 xxxx xxxxx
Volume/Cap:  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.12 0.00  0.02  0.01 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.6 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   1.6   0.5 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.6  10.1 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     B    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   737 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.4 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.5 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             10.2             10.1
ApproachLOS:         *                *                B                B
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   28   78     0     0   26    37    50    0    12     1    0     0
ApproachDel:    xxxxxx           xxxxxx             10.2             10.1
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=61]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=232]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=232]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   28   78     0     0   26    37    50    0    12     1    0     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             169
Minor Approach Volume:           61
Minor Approach Volume Threshold: 852
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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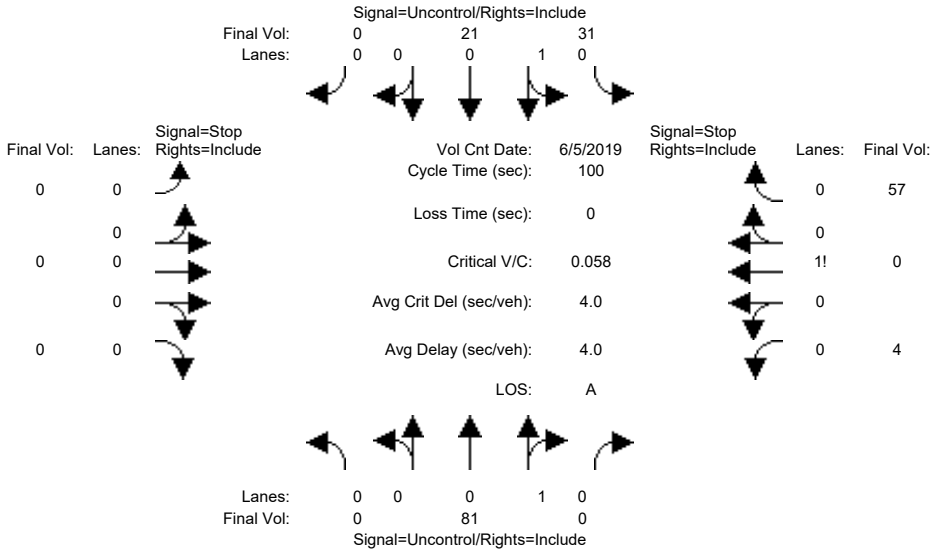
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_AM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   54     0    18   12     0     0    0     0     2    0    29
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:    0   64     0    21   14     0     0    0     0     2    0    34
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   64     0    21   14     0     0    0     0     2    0    34
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.79 0.79  0.79  0.68 0.68  0.68  1.00 1.00  1.00  0.60 0.60  0.60
PHF Volume:     0   81     0    31   21     0     0    0     0     4    0    57
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   81     0    31   21     0     0    0     0     4    0    57
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    81 xxxx xxxxx  xxxx xxxx xxxxx   164  164    81
Potent Cap.: xxxx xxxx xxxxx  1511 xxxx xxxxx  xxxx xxxx xxxxx   831  732   985
Move Cap.:   xxxx xxxx xxxxx  1511 xxxx xxxxx  xxxx xxxx xxxxx   818  717   985
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.06
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.6 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  972 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.2 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  9.0 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              9.0
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   64     0    21   14     0     0    0     0     2    0    34
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              9.0
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=37]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=136]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   64     0    21   14     0     0    0     0     2    0    34
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             99
Minor Approach Volume:           37
Minor Approach Volume Threshold: 835
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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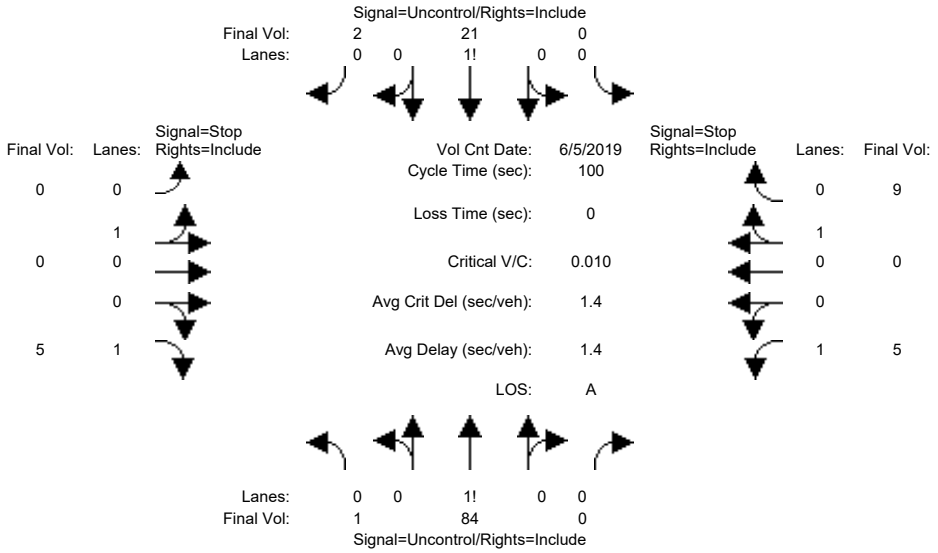
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_AM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       1   58     0     0   10     1     0    0     1     1    0     2
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:    1   69     0     0   12     1     0    0     1     1    0     2
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    1   69     0     0   12     1     0    0     1     1    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.82 0.82  0.82  0.55 0.55  0.55  0.25 0.25  0.25  0.25 0.25  0.25
PHF Volume:     1   84     0     0   21     2     0    0     5     5    0     9
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    1   84     0     0   21     2     0    0     5     5    0     9
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   24 xxxx xxxxx  xxxx xxxx xxxxx   114  109    23   111  110    84
Potent Cap.: 1585 xxxx xxxxx  xxxx xxxx xxxxx   868  785  1060   871  784   981
Move Cap.:   1585 xxxx xxxxx  xxxx xxxx xxxxx   859  784  1060   867  783   981
Volume/Cap:  0.00 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.00  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.1 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3   0.4 xxxx xxxxx
Control Del:  7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.4   9.2 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx     0 xxxx xxxxx  xxxx xxxx   981
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:  7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.7
Shared LOS:     A    *     *     *    *     *     *    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx               8.4               8.9
ApproachLOS:         *                *                 A                 A
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    1   69     0     0   12     1     0    0     1     1    0     2
ApproachDel:    xxxxxx           xxxxxx              8.4              8.9
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=87]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=4]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=87]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    1   69     0     0   12     1     0    0     1     1    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             83
Minor Approach Volume:           4
Minor Approach Volume Threshold: 1077
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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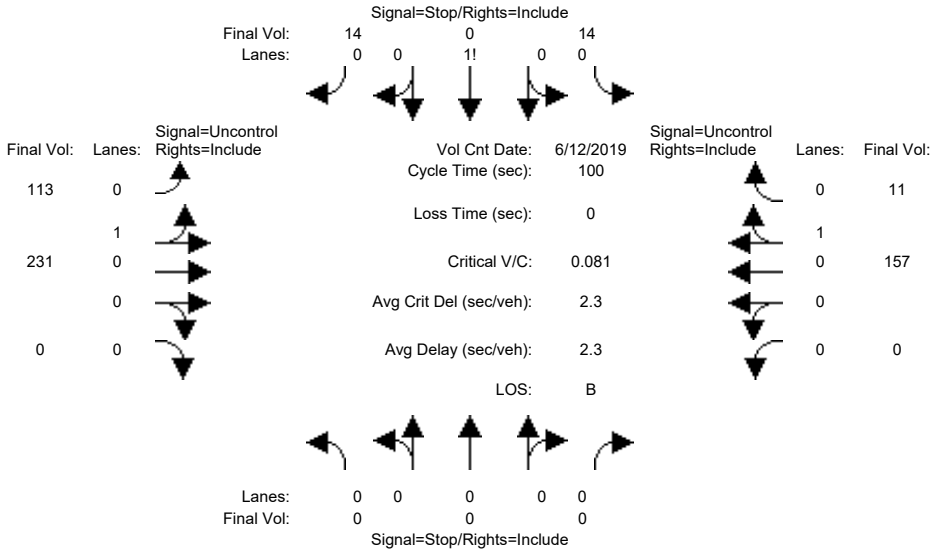
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_AM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0     7    0     7    52  106     0     0   74     5
Growth Adj:  1.00 1.00  1.00  1.18 1.18  1.18  1.68 1.68  1.68  1.68 1.68  1.68
Initial Bse:    0    0     0     8    0     8    87  178     0     0  124     8
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     8    0     8    87  178     0     0  124     8
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.58 0.58  0.58  0.77 0.77  0.77  0.79 0.79  0.79
PHF Volume:     0    0     0    14    0    14   113  231     0     0  157    11
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    14    0    14   113  231     0     0  157    11
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.5  6.6   6.3   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.6  4.1   3.4   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   621  621   163   168 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   443  397   869  1404 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   414  363   869  1404 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.03 0.00  0.02  0.08 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   6.6 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.8 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  561 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.2 xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 11.8 xxxxx   7.8 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             11.8           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0     8    0     8    87  178     0     0  124     8
ApproachDel:    xxxxxx             11.8           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=17]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=415]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0     8    0     8    87  178     0     0  124     8
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             398
Minor Approach Volume:           17
Minor Approach Volume Threshold: 465
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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jurisdiction.  Consideration of the other signal warrants, which is beyond
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```


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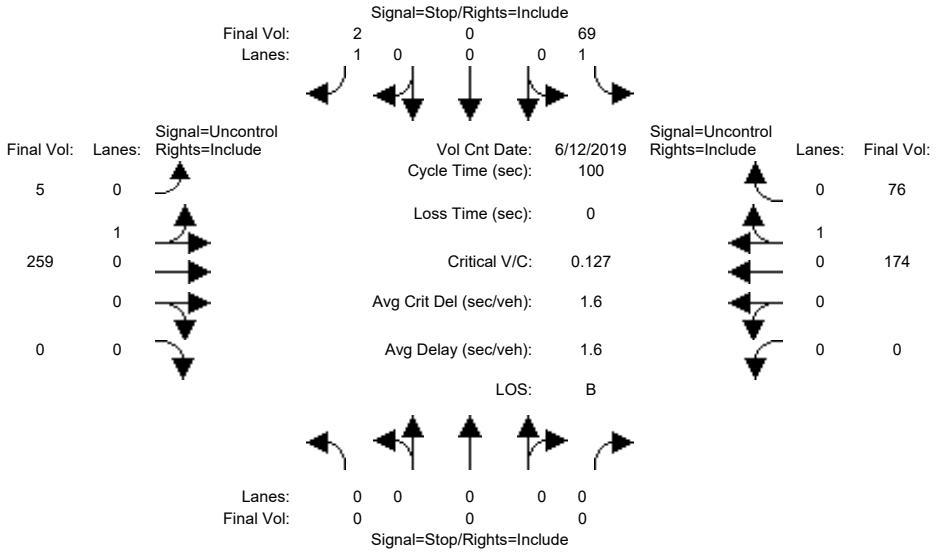
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_AM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0    36    0     1     2  114     0     0   89    39
Growth Adj:  1.00 1.00  1.00  1.18 1.18  1.18  1.68 1.68  1.68  1.68 1.68  1.68
Initial Bse:    0    0     0    43    0     1     3  191     0     0  149    66
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    43    0     1     3  191     0     0  149    66
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.62 0.62  0.62  0.74 0.74  0.74  0.86 0.86  0.86
PHF Volume:     0    0     0    69    0     2     5  259     0     0  174    76
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    69    0     2     5  259     0     0  174    76
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   480 xxxx   212   250 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   543 xxxx   826  1310 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   542 xxxx   826  1310 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.13 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  10.8 xxxx   0.2   0.3 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  12.6 xxxx   9.4   7.8 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     A     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.8 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             12.5           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    43    0     1     3  191     0     0  149    66
ApproachDel:    xxxxxx             12.5           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=44]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=454]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    43    0     1     3  191     0     0  149    66
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             410
Minor Approach Volume:           44
Minor Approach Volume Threshold: 573
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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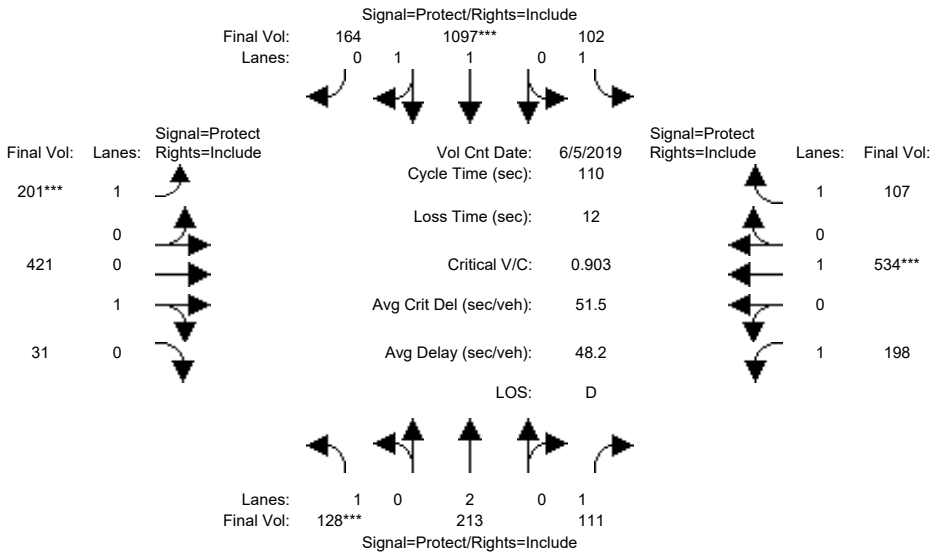
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CU_PM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	94	169	88	83	891	127	101	211	16	117	305	63
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.68	1.68	1.68	1.68	1.68	1.68
Initial Bse:	111	200	104	98	1053	150	170	354	27	197	512	106
Added Vol:	9	0	0	0	0	7	3	8	0	0	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	120	200	104	98	1053	157	173	362	27	197	528	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.99	0.99	0.99
PHF Volume:	128	213	111	102	1097	164	201	421	31	198	534	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	213	111	102	1097	164	201	421	31	198	534	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	213	111	102	1097	164	201	421	31	198	534	107
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.72	0.28	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3270	488	1750	1758	130	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.06	0.06	0.34	0.34	0.11	0.24	0.24	0.11	0.28	0.06
Crit Moves:	****				****		****				****	
Green Time:	8.9	27.7	27.7	22.1	40.9	40.9	14.0	32.7	32.7	15.5	34.2	34.2
Volume/Cap:	0.90	0.22	0.25	0.29	0.90	0.90	0.90	0.81	0.81	0.81	0.90	0.20
Uniform Del:	50.1	32.6	32.9	37.3	32.7	32.7	47.3	35.7	35.7	45.8	36.3	27.8
IncremntDel:	47.6	0.1	0.3	0.5	8.4	8.4	35.1	8.3	8.3	17.4	17.1	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	97.8	32.8	33.2	37.7	41.1	41.1	82.5	44.0	44.0	63.2	53.4	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	97.8	32.8	33.2	37.7	41.1	41.1	82.5	44.0	44.0	63.2	53.4	28.0
LOS by Move:	F	C-	C-	D+	D	D	F	D	D	E	D-	C
HCM2kAvgQ:	188	71	82	74	524	524	263	405	405	231	524	71

Note: Queue reported is the distance per lane in feet.

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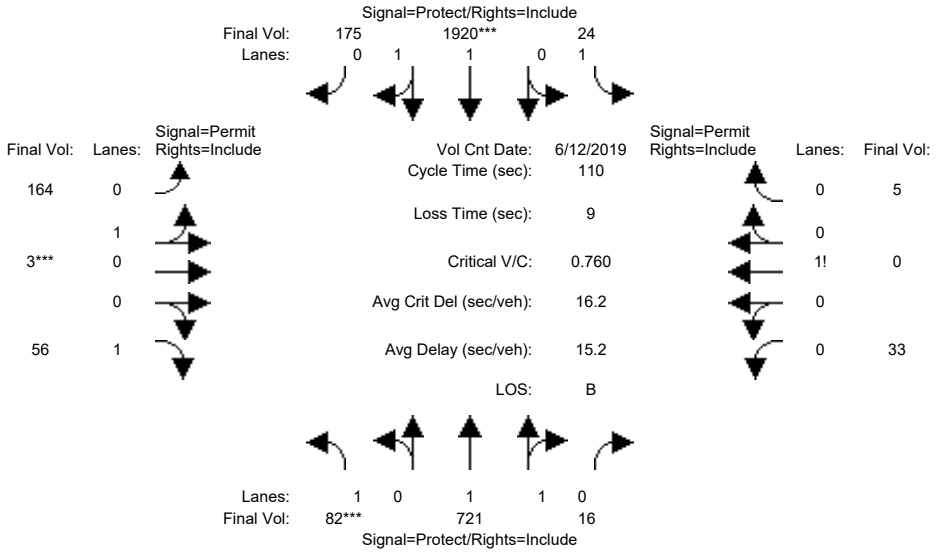
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CU_PM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 12 Jun 2019 <<												
Base Vol:	60	522	12	19	1505	138	118	2	40	20	0	3
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Initial Bse:	71	617	14	22	1779	163	139	2	47	24	0	4
Added Vol:	0	3	0	0	7	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	620	14	22	1786	163	139	2	47	24	0	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.93	0.93	0.93	0.85	0.85	0.85	0.72	0.72	0.72
PHF Volume:	82	721	16	24	1920	175	164	3	56	33	0	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	721	16	24	1920	175	164	3	56	33	0	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	82	721	16	24	1920	175	164	3	56	33	0	5
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.95	0.05	1.00	1.82	0.18	0.98	0.02	1.00	0.87	0.00	0.13
Final Sat.:	1750	3708	85	1750	3457	316	1723	29	1750	1522	0	228
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.19	0.01	0.56	0.56	0.10	0.10	0.03	0.02	0.00	0.02
Crit Moves:	****				****			****				
Green Time:	6.8	73.5	73.5	13.7	80.4	80.4	13.8	13.8	13.8	13.8	0.0	13.8
Volume/Cap:	0.76	0.29	0.29	0.11	0.76	0.76	0.76	0.76	0.25	0.17	0.00	0.17
Uniform Del:	50.8	7.5	7.5	42.7	9.0	9.0	46.5	46.5	43.5	43.0	0.0	43.0
IncremntDel:	26.4	0.1	0.1	0.2	1.3	1.3	14.3	14.3	0.6	0.4	0.0	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Delay/Veh:	77.1	7.6	7.6	42.9	10.2	10.2	60.8	60.8	44.1	43.4	0.0	43.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.1	7.6	7.6	42.9	10.2	10.2	60.8	60.8	44.1	43.4	0.0	43.4
LOS by Move:	E-	A	A	D	B+	B+	E	E	D	D	A	D
HCM2kAvgQ:	82	125	125	21	562	562	193	193	50	33	0	33

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Note: Queue reported is the distance per lane in feet.

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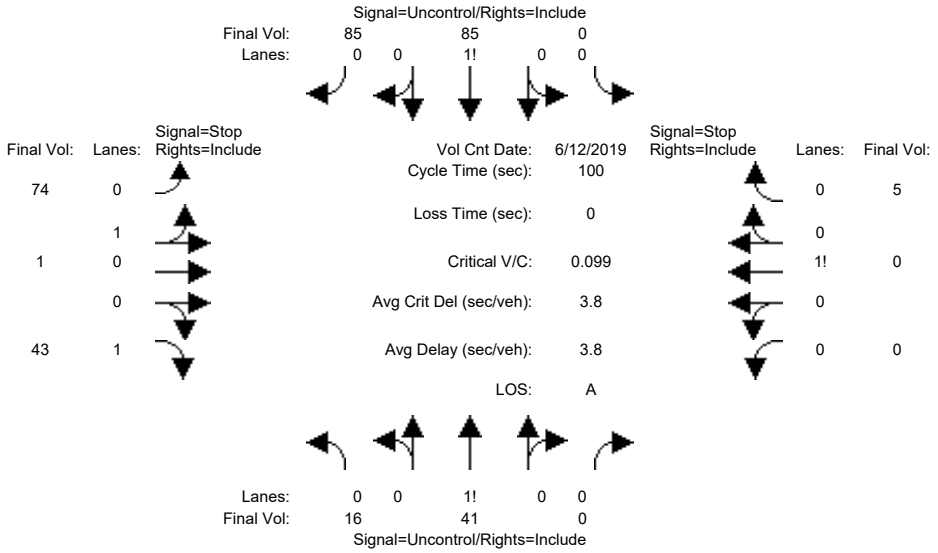
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_PM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                        Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:      10   26     0     0   57    57    59    1    34     0    0     1
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:   12   31     0     0   67    67    70    1    40     0    0     1
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   12   31     0     0   67    67    70    1    40     0    0     1
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.75 0.75  0.75  0.79 0.79  0.79  0.94 0.94  0.94  0.25 0.25  0.25
PHF Volume:    16   41     0     0   85    85    74    1    43     0    0     5
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   16   41     0     0   85    85    74    1    43     0    0     5
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2 xxxxx xxxx   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  172 xxxx xxxxx  xxxx xxxx xxxxx   204  201   131  xxxx xxxx    41
Potent Cap.: 1418 xxxx xxxxx  xxxx xxxx xxxxx   756  696   921  xxxx xxxx  1036
Move Cap.:   1417 xxxx xxxxx  xxxx xxxx xxxxx   746  688   919  xxxx xxxx  1036
Volume/Cap:  0.01 xxxx  xxxx  xxxx xxxx  xxxx  0.10 0.00  0.05  xxxx xxxx  0.00
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.8 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   3.7  xxxx xxxx   0.3
Control Del:  7.6 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   9.1 xxxxx xxxx   8.5
LOS by Move:    A    *     *     *    *     *     *    *     A     *    *     A
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   745 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.6 xxxx xxxxx xxxxx xxxx xxxxx  10.4 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx              9.9              8.5
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   12   31     0     0   67    67    70    1    40     0    0     1
ApproachDel:    xxxxxx           xxxxxx              9.9              8.5
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=111]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=290]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=290]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   12   31     0     0   67    67    70    1    40     0    0     1
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             177
Minor Approach Volume:           111
Minor Approach Volume Threshold: 837
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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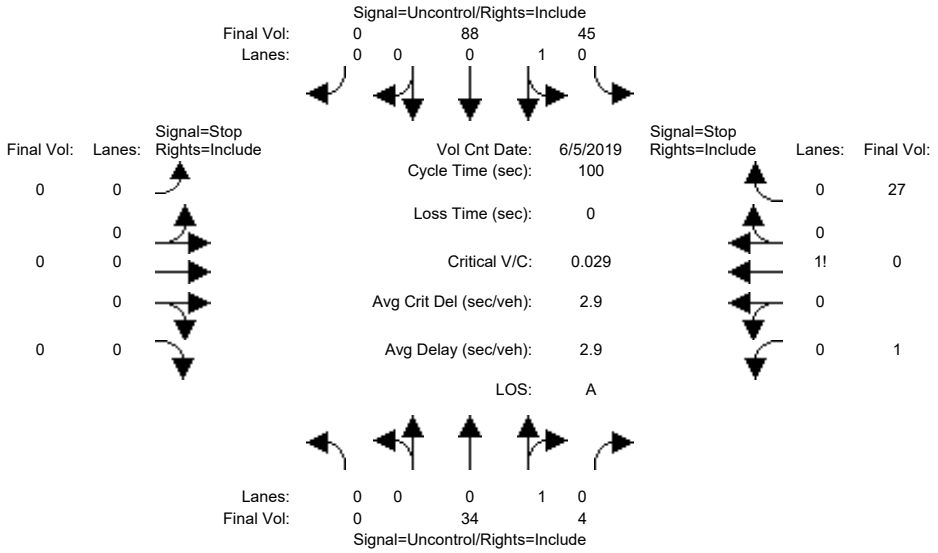
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_PM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   17     2    31   60     0     0    0     0     1    0    18
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:    0   20     2    37   71     0     0    0     0     1    0    21
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   20     2    37   71     0     0    0     0     1    0    21
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.59 0.59  0.59  0.81 0.81  0.81  1.00 1.00  1.00  0.79 0.79  0.79
PHF Volume:     0   34     4    45   88     0     0    0     0     1    0    27
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   34     4    45   88     0     0    0     0     1    0    27
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    39 xxxx xxxxx  xxxx xxxx xxxxx   215  215    37
Potent Cap.: xxxx xxxx xxxxx  1584 xxxx xxxxx  xxxx xxxx xxxxx   778  686  1041
Move Cap.:   xxxx xxxx xxxxx  1583 xxxx xxxxx  xxxx xxxx xxxxx   760  665  1040
Volume/Cap:  xxxx xxxx  xxxx  0.03 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.03
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   2.2 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx 1020 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.1 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.3 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.6 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.6
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   20     2    37   71     0     0    0     0     1    0    21
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.6
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=22]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=152]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   20     2    37   71     0     0    0     0     1    0    21
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             130
Minor Approach Volume:           22
Minor Approach Volume Threshold: 763
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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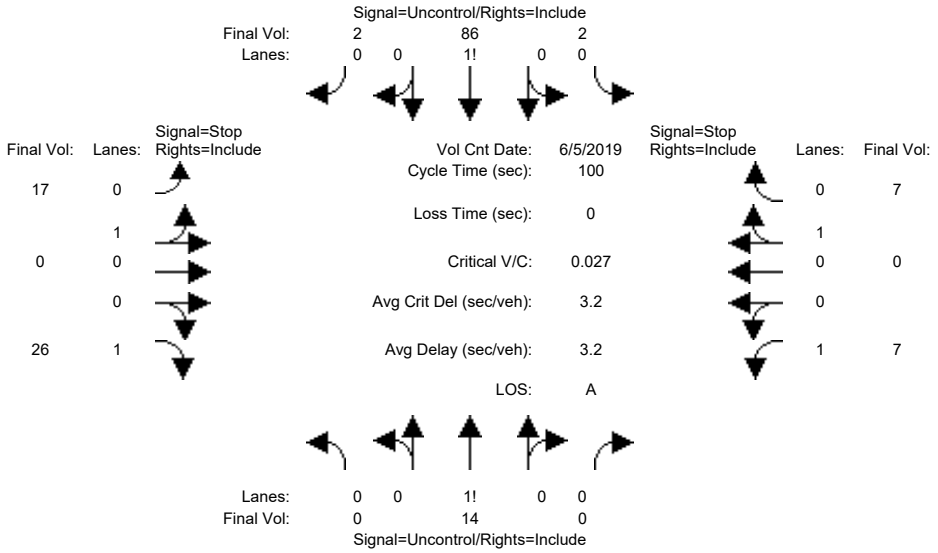
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_PM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    8     0     1   57     1     7    0    11     2    0     2
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:    0    9     0     1   67     1     8    0    13     2    0     2
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    9     0     1   67     1     8    0    13     2    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.67 0.67  0.67  0.78 0.78  0.78  0.50 0.50  0.50  0.33 0.33  0.33
PHF Volume:     0   14     0     2   86     2    17    0    26     7    0     7
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   14     0     2   86     2    17    0    26     7    0     7
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    14 xxxx xxxxx   108  104    87   117  105    14
Potent Cap.: xxxx xxxx xxxxx  1617 xxxx xxxxx   876  790   977   864  789  1072
Move Cap.:   xxxx xxxx xxxxx  1617 xxxx xxxxx   869  789   977   840  788  1072
Volume/Cap:  xxxx xxxx  xxxx  0.00 xxxx  xxxx  0.02 0.00  0.03  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx   2.0   0.6 xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.2 xxxx xxxxx xxxxx xxxx   8.8   9.3 xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     A     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   869 xxxx xxxxx  xxxx xxxx  1072
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   9.2 xxxx xxxxx xxxxx xxxx   8.4
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx              9.0              8.9
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    0    9     0     1   67     1     8    0    13     2    0     2
ApproachDel:    xxxxxx           xxxxxx              9.0              8.9
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=21]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=105]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=5]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=105]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
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a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:    0    9     0     1   67     1     8    0    13     2    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             79
Minor Approach Volume:           21
Minor Approach Volume Threshold: 1090
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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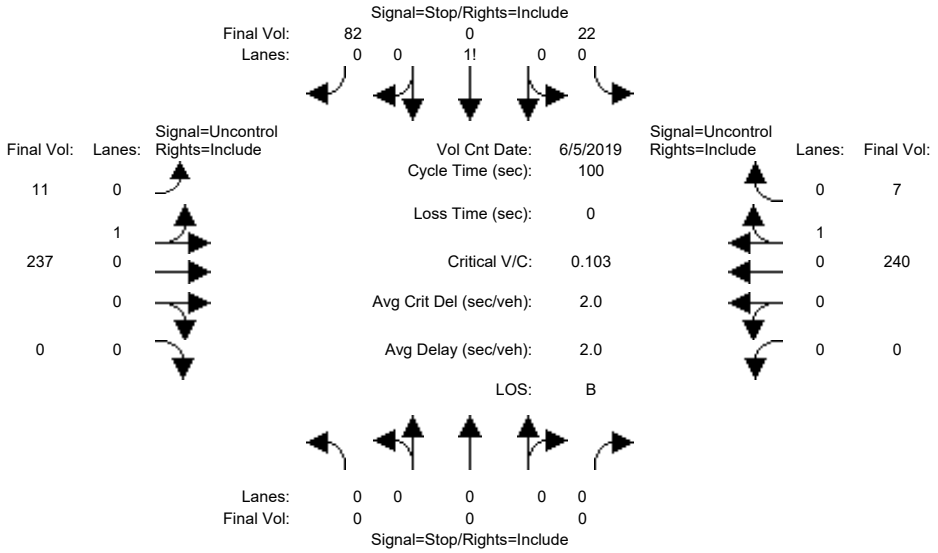
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_PM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    12    0    45     6  127     0     0  136     4
Growth Adj:  1.00 1.00  1.00  1.18 1.18  1.18  1.68 1.68  1.68  1.68 1.68  1.68
Initial Bse:    0    0     0    14    0    53    10  213     0     0  228     7
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    14    0    53    10  213     0     0  228     7
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.65 0.65  0.65  0.90 0.90  0.90  0.95 0.95  0.95
PHF Volume:     0    0     0    22    0    82    11  237     0     0  240     7
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    22    0    82    11  237     0     0  240     7
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   503  503   247   248 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   532  474   797  1324 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   528  469   795  1324 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.04 0.00  0.10  0.01 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.6 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  718 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.5 xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 10.9 xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             10.9           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    14    0    53    10  213     0     0  228     7
ApproachDel:    xxxxxx             10.9           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=67]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=526]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    14    0    53    10  213     0     0  228     7
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             459
Minor Approach Volume:           67
Minor Approach Volume Threshold: 427
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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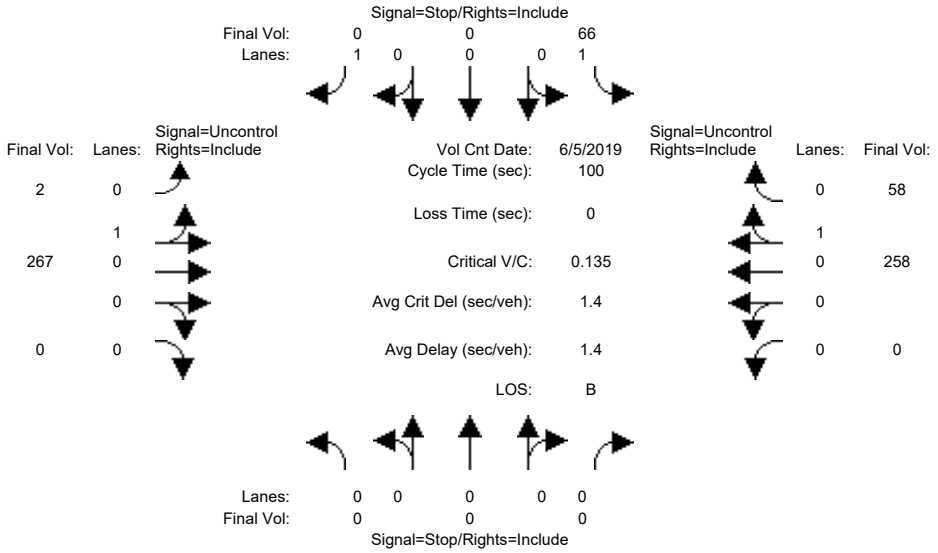
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU_PM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    45    0     0     1  140     0     0  138    31
Growth Adj:  1.00 1.00  1.00  1.18 1.18  1.18  1.68 1.68  1.68  1.68 1.68  1.68
Initial Bse:    0    0     0    53    0     0     2  235     0     0  232    52
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    53    0     0     2  235     0     0  232    52
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.80 0.80  0.80  0.88 0.88  0.88  0.90 0.90  0.90
PHF Volume:     0    0     0    66    0     0     2  267     0     0  258    58
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    66    0     0     2  267     0     0  258    58
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   557 xxxx   288   315 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   495 xxxx   755  1250 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   494 xxxx   754  1250 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.13 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  11.6 xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  13.4 xxxx xxxxx   7.9 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             13.4           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    53    0     0     2  235     0     0  232    52
ApproachDel:    xxxxxx             13.4           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=53]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=574]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    53    0     0     2  235     0     0  232    52
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             521
Minor Approach Volume:           53
Minor Approach Volume Threshold: 498
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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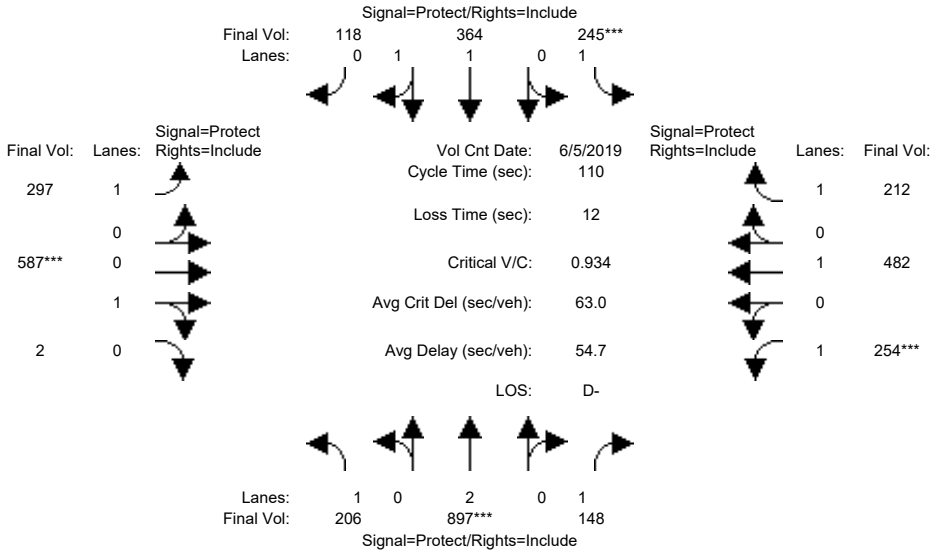
Kimley»Horn

G. CUMULATIVE PLUS PROJECT CONDITIONS TRAFFIX OUTPUT SHEETS

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CU+P_AM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.0	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	140	668	110	164	243	78	152	293	1	109	187	91
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.68	1.68	1.68	1.68	1.68	1.68
Initial Bse:	165	790	130	194	287	92	255	492	2	183	314	153
Added Vol:	16	0	0	0	0	1	0	13	0	0	33	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	181	790	130	194	287	93	255	505	2	183	347	153
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.79	0.79	0.79	0.86	0.86	0.86	0.72	0.72	0.72
PHF Volume:	206	897	148	245	364	118	297	587	2	254	482	212
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	897	148	245	364	118	297	587	2	254	482	212
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	206	897	148	245	364	118	297	587	2	254	482	212
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.48	0.52	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	2810	912	1750	1893	6	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.24	0.08	0.14	0.13	0.13	0.17	0.31	0.31	0.15	0.25	0.12
Crit Moves:		****		****				****		****		
Green Time:	21.1	27.8	27.8	16.5	23.2	23.2	21.5	36.5	36.5	17.1	32.2	32.2
Volume/Cap:	0.61	0.93	0.33	0.93	0.61	0.61	0.87	0.93	0.93	0.93	0.87	0.41
Uniform Del:	40.7	40.2	33.5	46.2	39.3	39.3	42.9	35.6	35.6	45.9	36.9	31.3
IncremntDel:	3.3	15.5	0.4	38.0	1.4	1.4	20.3	21.1	21.1	37.1	13.6	0.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	44.0	55.7	34.0	84.2	40.8	40.8	63.2	56.6	56.6	83.0	50.5	31.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.0	55.7	34.0	84.2	40.8	40.8	63.2	56.6	56.6	83.0	50.5	31.9
LOS by Move:	D	E+	C-	F	D	D	E	E+	E+	F	D	C
HCM2kAvgQ:	193	479	112	262	187	187	338	595	595	328	460	159

Note: Queue reported is the distance per lane in feet.

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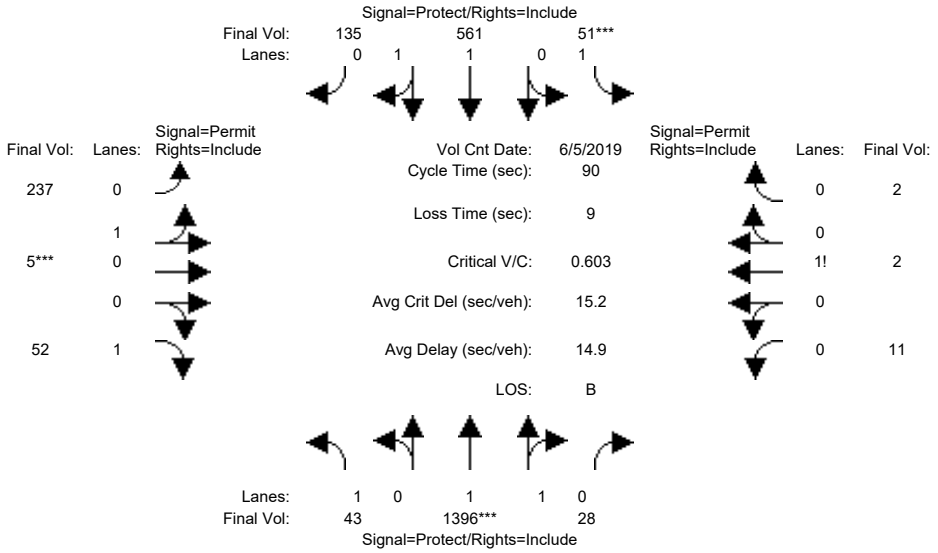
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CU+P_AM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	33	1063	21	40	436	92	167	4	38	7	1	1
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Initial Bse:	39	1257	25	47	515	109	197	5	45	8	1	1
Added Vol:	0	0	0	0	1	15	6	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	1257	25	47	516	124	203	5	45	8	1	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.92	0.92	0.92	0.86	0.86	0.86	0.75	0.75	0.75
PHF Volume:	43	1396	28	51	561	135	237	5	52	11	2	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	1396	28	51	561	135	237	5	52	11	2	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	1396	28	51	561	135	237	5	52	11	2	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.96	0.04	1.00	1.59	0.41	0.98	0.02	1.00	0.79	0.10	0.11
Final Sat.:	1750	3720	73	1750	3015	723	1713	40	1750	1373	196	196
Capacity Analysis Module:												
Vol/Sat:	0.02	0.38	0.38	0.03	0.19	0.19	0.14	0.14	0.03	0.01	0.01	0.01
Crit Moves:		****		****				****				
Green Time:	11.6	56.0	56.0	4.4	48.8	48.8	20.6	20.6	20.6	20.6	20.6	20.6
Volume/Cap:	0.19	0.60	0.60	0.60	0.34	0.34	0.60	0.60	0.13	0.04	0.04	0.04
Uniform Del:	35.0	10.3	10.3	42.0	11.6	11.6	31.0	31.0	27.6	27.0	27.0	27.0
IncremntDel:	0.4	0.4	0.4	11.6	0.1	0.1	2.6	2.6	0.1	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	35.4	10.7	10.7	53.5	11.7	11.7	33.6	33.6	27.7	27.0	27.0	27.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.4	10.7	10.7	53.5	11.7	11.7	33.6	33.6	27.7	27.0	27.0	27.0
LOS by Move:	D+	B+	B+	D-	B+	B+	C-	C-	C	C	C	C
HCM2kAvgQ:	27	276	276	64	137	137	182	182	32	8	8	8

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Note: Queue reported is the distance per lane in feet.

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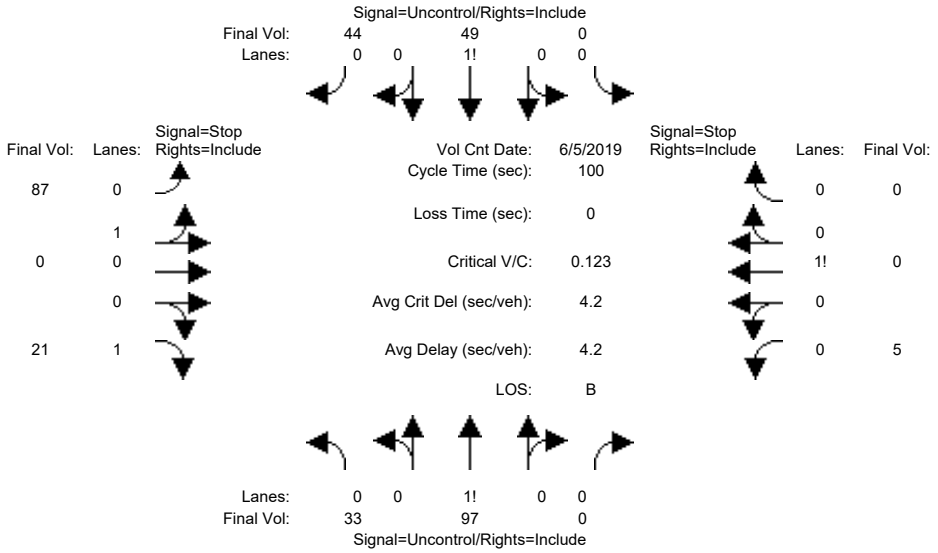
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_AM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                       Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:      24   66     0     0   22    31    42    0    10     1    0     0
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:   28   78     0     0   26    37    50    0    12     1    0     0
Added Vol:      0    6     0     0   15     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   28   84     0     0   41    37    50    0    12     1    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.87 0.87  0.87  0.83 0.83  0.83  0.57 0.57  0.57  0.25 0.25  0.25
PHF Volume:    33   97     0     0   49    44    87    0    21     5    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   33   97     0     0   49    44    87    0    21     5    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1 xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   94 xxxx xxxxx  xxxx xxxx xxxxx   233  233    71   244 xxxx xxxxx
Potent Cap.: 1513 xxxx xxxxx  xxxx xxxx xxxxx   721  667   991   714 xxxx xxxxx
Move Cap.:   1513 xxxx xxxxx  xxxx xxxx xxxxx   709  652   991   688 xxxx xxxxx
Volume/Cap:  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.12 0.00  0.02  0.01 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.7 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   1.6   0.5 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.7  10.3 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     B    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   709 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.4 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.8 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             10.4             10.3
ApproachLOS:         *                *                B                B
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   28   84     0     0   41    37    50    0    12     1    0     0
ApproachDel:    xxxxxx           xxxxxx             10.4             10.3
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=61]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=253]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=253]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  0  0
Initial Vol:   28   84     0     0   41    37    50    0    12     1    0     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             190
Minor Approach Volume:           61
Minor Approach Volume Threshold: 815
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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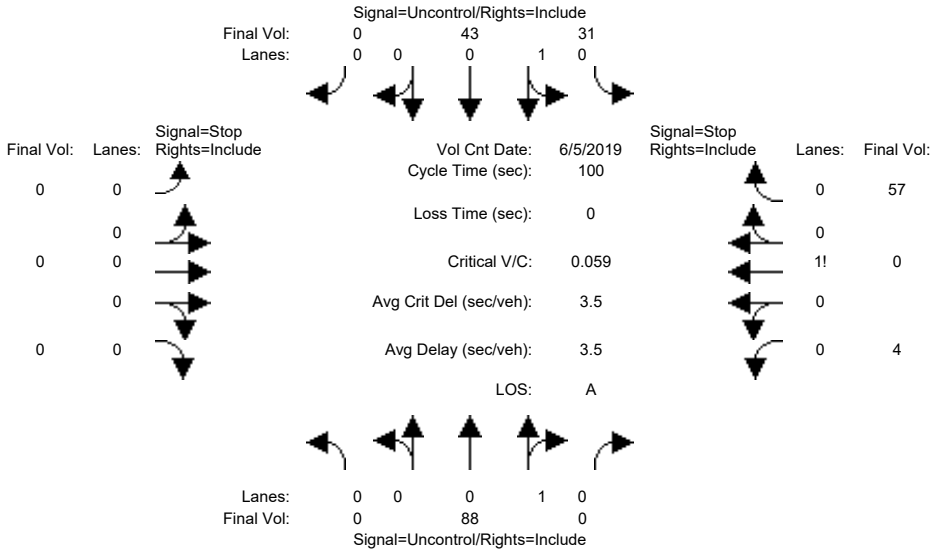
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_AM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   54     0    18   12     0     0    0     0     2    0    29
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:    0   64     0    21   14     0     0    0     0     2    0    34
Added Vol:      0    6     0     0   15     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   70     0    21   29     0     0    0     0     2    0    34
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.79 0.79  0.79  0.68 0.68  0.68  1.00 1.00  1.00  0.60 0.60  0.60
PHF Volume:     0   88     0    31   43     0     0    0     0     4    0    57
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   88     0    31   43     0     0    0     0     4    0    57
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    88 xxxx xxxxx  xxxx xxxx xxxxx   194  194    88
Potent Cap.: xxxx xxxx xxxxx  1501 xxxx xxxxx  xxxx xxxx xxxxx   800  705   975
Move Cap.:   xxxx xxxx xxxxx  1501 xxxx xxxxx  xxxx xxxx xxxxx   787  690   975
Volume/Cap:  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.01 0.00  0.06
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   1.6 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  960 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.2 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  9.0 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              9.0
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   70     0    21   29     0     0    0     0     2    0    34
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              9.0
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=37]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=157]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  0  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   70     0    21   29     0     0    0     0     2    0    34
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             120
Minor Approach Volume:           37
Minor Approach Volume Threshold: 784
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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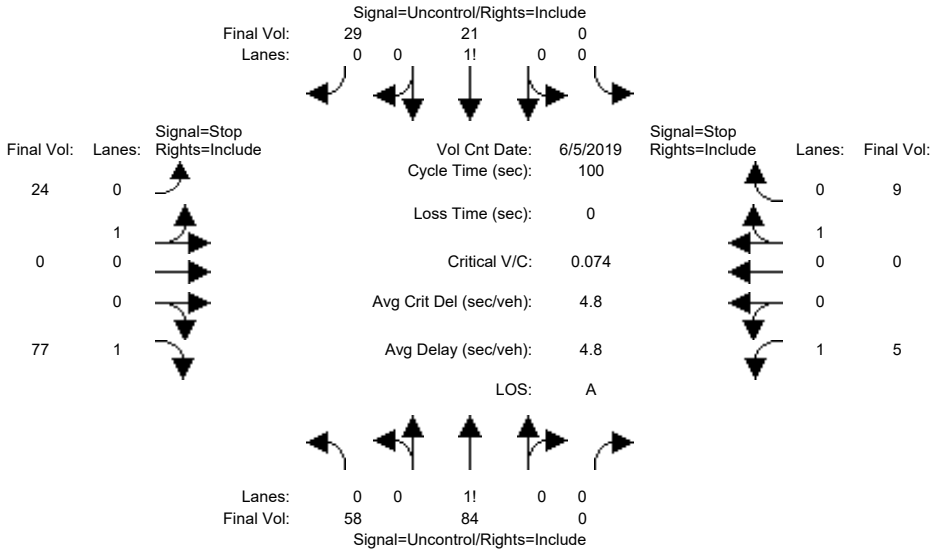
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_AM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       1   58     0     0   10     1     0    0     1     1    0     2
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:    1   69     0     0   12     1     0    0     1     1    0     2
Added Vol:     46    0     0     0    0    15     6    0    18     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   47   69     0     0   12    16     6    0    19     1    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.82 0.82  0.82  0.55 0.55  0.55  0.25 0.25  0.25  0.25 0.25  0.25
PHF Volume:    58   84     0     0   21    29    24    0    77     5    0     9
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   58   84     0     0   21    29    24    0    77     5    0     9
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   51 xxxx xxxxx  xxxx xxxx xxxxx   240  235    36   273  250    84
Potent Cap.: 1549 xxxx xxxxx  xxxx xxxx xxxxx   719  669  1042   683  657   981
Move Cap.:   1549 xxxx xxxxx  xxxx xxxx xxxxx   691  643  1042   614  631   981
Volume/Cap:  0.04 xxxx  xxxx  xxxx xxxx  xxxx  0.03 0.00  0.07  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    2.9 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   5.9   0.6 xxxx xxxxx
Control Del:  7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   8.7  10.9 xxxx xxxxx
LOS by Move:    A    *     *     *    *     *     *    *     A     B    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   691 xxxx xxxxx  xxxx xxxx   981
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:  7.4 xxxx xxxxx xxxxx xxxx xxxxx  10.4 xxxx xxxxx xxxxx xxxx   8.7
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx              9.1              9.4
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   47   69     0     0   12    16     6    0    19     1    0     2
ApproachDel:    xxxxxx           xxxxxx              9.1              9.4
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=25]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=172]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=4]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=172]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   47   69     0     0   12    16     6    0    19     1    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             144
Minor Approach Volume:           25
Minor Approach Volume Threshold: 903
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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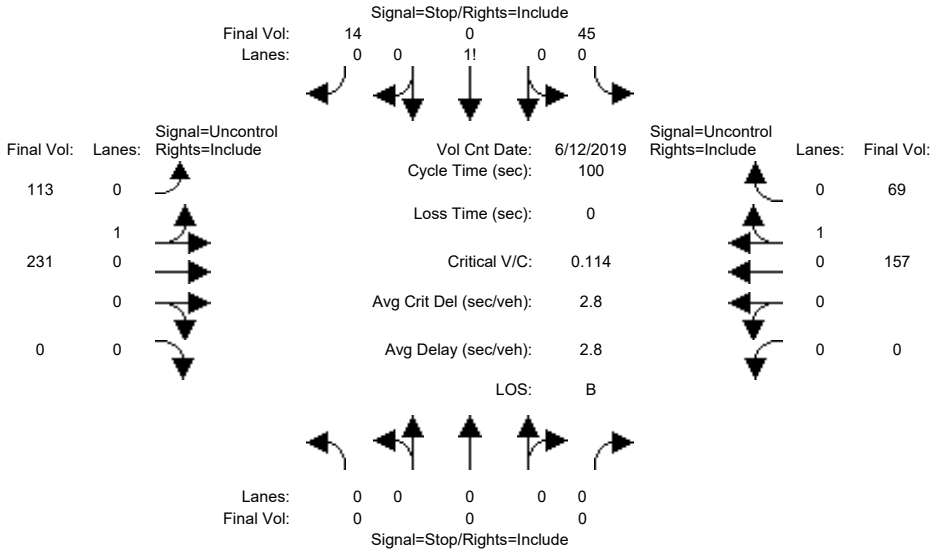
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_AM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0     7    0     7    52  106     0     0   74     5
Growth Adj:  1.00 1.00  1.00  1.18 1.18  1.18  1.68 1.68  1.68  1.68 1.68  1.68
Initial Bse:    0    0     0     8    0     8    87  178     0     0  124     8
Added Vol:      0    0     0    18    0     0     0    0     0     0    0    46
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    26    0     8    87  178     0     0  124    54
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.58 0.58  0.58  0.77 0.77  0.77  0.79 0.79  0.79
PHF Volume:     0    0     0    45    0    14   113  231     0     0  157    69
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    45    0    14   113  231     0     0  157    69
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.5  6.6   6.3   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.6  4.1   3.4   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   650  650   192   226 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   426  382   837  1336 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   397  347   837  1336 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.11 0.00  0.02  0.08 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   6.9 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  454 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.4 xxxxx   0.3 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 14.1 xxxxx   7.9 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             14.1           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    26    0     8    87  178     0     0  124    54
ApproachDel:    xxxxxx             14.1           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=35]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=479]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    26    0     8    87  178     0     0  124    54
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             444
Minor Approach Volume:           35
Minor Approach Volume Threshold: 436
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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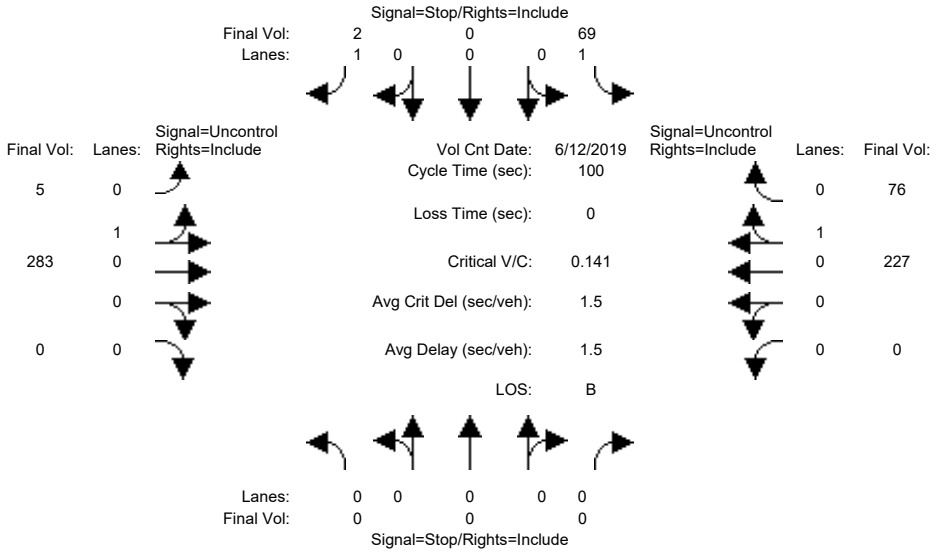
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_AM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:       0    0     0    36    0     1     2  114     0     0   89    39
Growth Adj:  1.00 1.00  1.00  1.18 1.18  1.18  1.68 1.68  1.68  1.68 1.68  1.68
Initial Bse:    0    0     0    43    0     1     3  191     0     0  149    66
Added Vol:      0    0     0     0    0     0     0   18     0     0   46     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    43    0     1     3  209     0     0  195    66
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.62 0.62  0.62  0.74 0.74  0.74  0.86 0.86  0.86
PHF Volume:     0    0     0    69    0     2     5  283     0     0  227    76
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    69    0     2     5  283     0     0  227    76
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   558 xxxx   265   303 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   489 xxxx   771  1252 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   488 xxxx   771  1252 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.14 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  12.2 xxxx   0.2   0.3 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  13.6 xxxx   9.7   7.9 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     A     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             13.5           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    43    0     1     3  209     0     0  195    66
ApproachDel:    xxxxxx             13.5           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=44]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=518]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    43    0     1     3  209     0     0  195    66
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             474
Minor Approach Volume:           44
Minor Approach Volume Threshold: 527
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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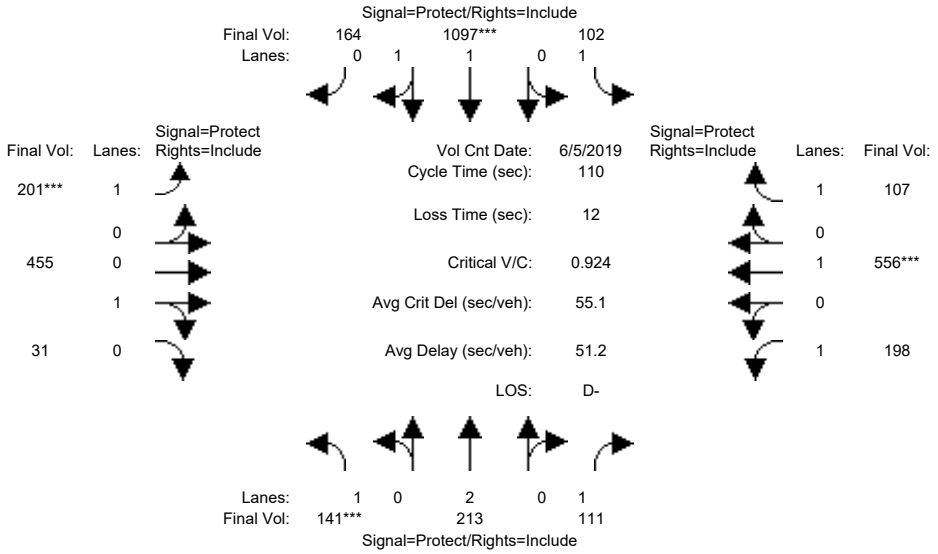
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CU+P_PM

Intersection #1: Sunnyvale-Saratoga Rd & Big Basin Way/Saratoga Avenue



Street Name:	Sunnyvale-Saratoga Rd						Big Basin Way / Saratoga Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	8	10	10	8	10	10	8	10	10	8	10	10
Y+R:	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.0	5.0	4.7	5.1	5.1
Volume Module: >> Count Date: 5 Jun 2019 <<												
Base Vol:	94	169	88	83	891	127	101	211	16	117	305	63
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.68	1.68	1.68	1.68	1.68	1.68
Initial Bse:	111	200	104	98	1053	150	170	354	27	197	512	106
Added Vol:	21	0	0	0	0	7	3	37	0	0	38	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	200	104	98	1053	157	173	391	27	197	550	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.99	0.99	0.99
PHF Volume:	141	213	111	102	1097	164	201	455	31	198	556	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	213	111	102	1097	164	201	455	31	198	556	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	213	111	102	1097	164	201	455	31	198	556	107
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	1.72	0.28	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3270	488	1750	1768	121	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.06	0.06	0.34	0.34	0.11	0.26	0.26	0.11	0.29	0.06
Crit Moves:	****				****		****				****	
Green Time:	9.6	27.5	27.5	22.0	39.9	39.9	13.7	33.7	33.7	14.8	34.8	34.8
Volume/Cap:	0.92	0.22	0.25	0.29	0.92	0.92	0.92	0.84	0.84	0.84	0.92	0.19
Uniform Del:	49.9	32.8	33.0	37.4	33.6	33.6	47.7	35.7	35.7	46.4	36.3	27.4
IncremntDel:	50.8	0.1	0.3	0.5	10.7	10.7	40.5	10.7	10.7	22.8	20.1	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	100.6	32.9	33.3	37.8	44.3	44.3	88.1	46.4	46.4	69.3	56.4	27.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	100.6	32.9	33.3	37.8	44.3	44.3	88.1	46.4	46.4	69.3	56.4	27.5
LOS by Move:	F	C-	C-	D+	D	D	F	D	D	E	E+	C
HCM2kAvgQ:	207	72	82	74	538	538	270	448	448	242	559	70

Note: Queue reported is the distance per lane in feet.

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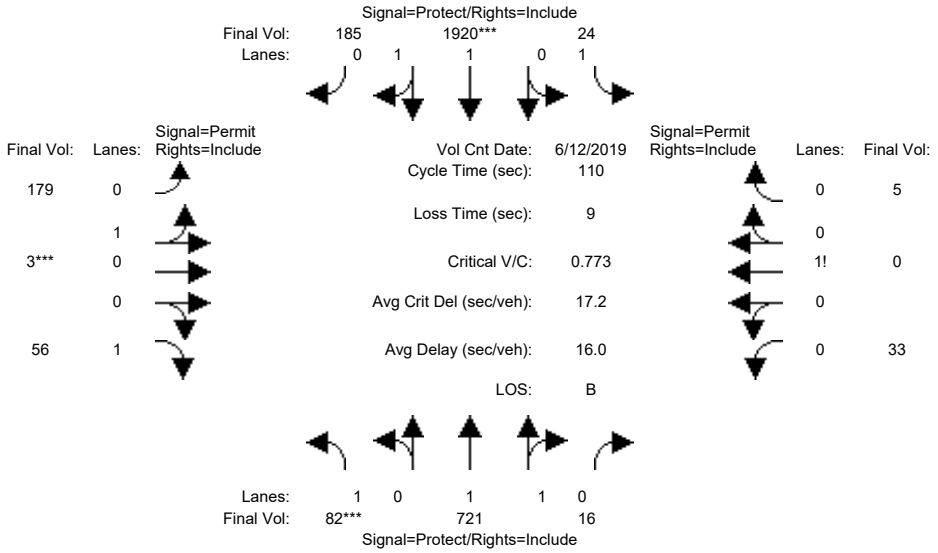
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CU+P_PM

Intersection #2: Sunnyvale-Saratoga Rd & Pierce Rd



Street Name:	Sunnyvale-Saratoga Rd						Pierce Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	4	10	10	4	10	10	4	4	4	4	4	4
Y+R:	4.0	5.0	5.0	4.0	5.0	5.0	4.2	4.2	4.2	4.0	4.0	4.0
Volume Module: >> Count Date: 12 Jun 2019 <<												
Base Vol:	60	522	12	19	1505	138	118	2	40	20	0	3
Growth Adj:	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Initial Bse:	71	617	14	22	1779	163	139	2	47	24	0	4
Added Vol:	0	3	0	0	7	9	13	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	620	14	22	1786	172	152	2	47	24	0	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.93	0.93	0.93	0.85	0.85	0.85	0.72	0.72	0.72
PHF Volume:	82	721	16	24	1920	185	179	3	56	33	0	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	721	16	24	1920	185	179	3	56	33	0	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	82	721	16	24	1920	185	179	3	56	33	0	5
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.95	0.05	1.00	1.81	0.19	0.99	0.01	1.00	0.87	0.00	0.13
Final Sat.:	1750	3708	85	1750	3440	332	1725	27	1750	1522	0	228
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.19	0.01	0.56	0.56	0.10	0.10	0.03	0.02	0.00	0.02
Crit Moves:	****				****			****				
Green Time:	6.7	72.6	72.6	13.6	79.5	79.5	14.8	14.8	14.8	14.8	0.0	14.8
Volume/Cap:	0.77	0.29	0.29	0.11	0.77	0.77	0.77	0.77	0.24	0.16	0.00	0.16
Uniform Del:	50.9	7.9	7.9	42.8	9.6	9.6	46.0	46.0	42.5	42.1	0.0	42.1
IncremntDel:	28.7	0.1	0.1	0.2	1.4	1.4	14.6	14.6	0.5	0.3	0.0	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Delay/Veh:	79.6	8.0	8.0	43.1	11.0	11.0	60.5	60.5	43.1	42.4	0.0	42.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.6	8.0	8.0	43.1	11.0	11.0	60.5	60.5	43.1	42.4	0.0	42.4
LOS by Move:	E-	A	A	D	B+	B+	E	E	D	D	A	D
HCM2kAvgQ:	82	128	128	21	587	587	209	209	49	32	0	32

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Note: Queue reported is the distance per lane in feet.

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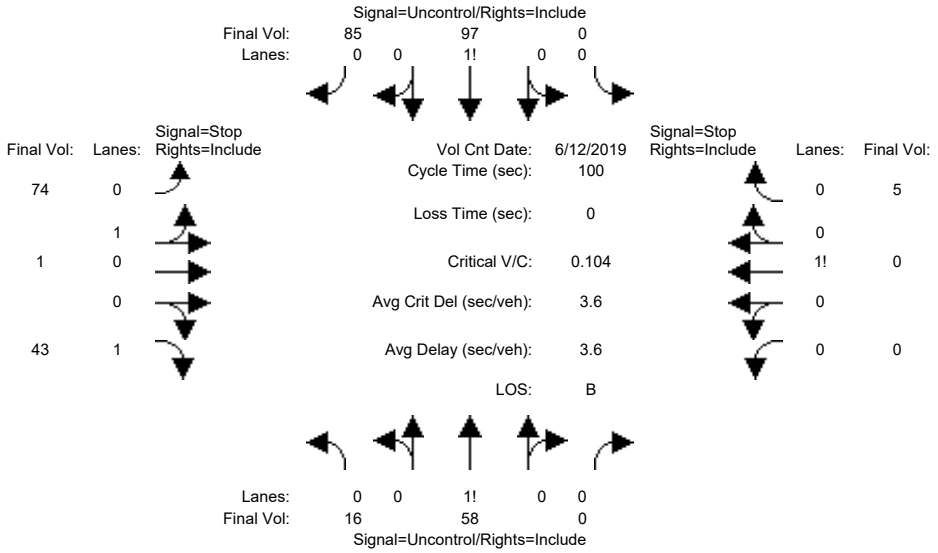
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_PM

Intersection #3: Pierce Rd & Mt Eden Rd/Ct




```
Street Name:            Pierce Rd                        Mt Eden Rd/Ct
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 12 Jun 2019 <<
Base Vol:      10   26     0     0   57    57    59    1    34     0    0     1
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:   12   31     0     0   67    67    70    1    40     0    0     1
Added Vol:      0   13     0     0    9     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   12   44     0     0   76    67    70    1    40     0    0     1
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.75 0.75  0.75  0.79 0.79  0.79  0.94 0.94  0.94  0.25 0.25  0.25
PHF Volume:    16   58     0     0   97    85    74    1    43     0    0     5
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   16   58     0     0   97    85    74    1    43     0    0     5
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   7.1  6.5   6.2 xxxxx xxxx   6.2
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  183 xxxx xxxxx  xxxx xxxx xxxxx   233  230   142  xxxx xxxx    58
Potent Cap.: 1404 xxxx xxxxx  xxxx xxxx xxxxx   724  671   908  xxxx xxxx  1013
Move Cap.:   1403 xxxx xxxxx  xxxx xxxx xxxxx   714  663   906  xxxx xxxx  1013
Volume/Cap:  0.01 xxxx  xxxx  xxxx xxxx  xxxx  0.10 0.00  0.05  xxxx xxxx  0.00
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    0.9 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   3.7  xxxx xxxx   0.4
Control Del:  7.6 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   9.2 xxxxx xxxx   8.6
LOS by Move:    A    *     *     *    *     *     *    *     A     *    *     A
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   713 xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:  0.0 xxxx xxxxx xxxxx xxxx xxxxx   0.4 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:  7.6 xxxx xxxxx xxxxx xxxx xxxxx  10.6 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             10.1              8.6
ApproachLOS:         *                *                B                A
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   12   44     0     0   76    67    70    1    40     0    0     1
ApproachDel:    xxxxxx           xxxxxx             10.1              8.6
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=111]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=312]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=312]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #3 Pierce Rd & Mt Eden Rd/Ct
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  0  1  0    0  1  0  0  1    0  0  0  0  1
Initial Vol:   12   44     0     0   76    67    70    1    40     0    0     1
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             199
Minor Approach Volume:           111
Minor Approach Volume Threshold: 800
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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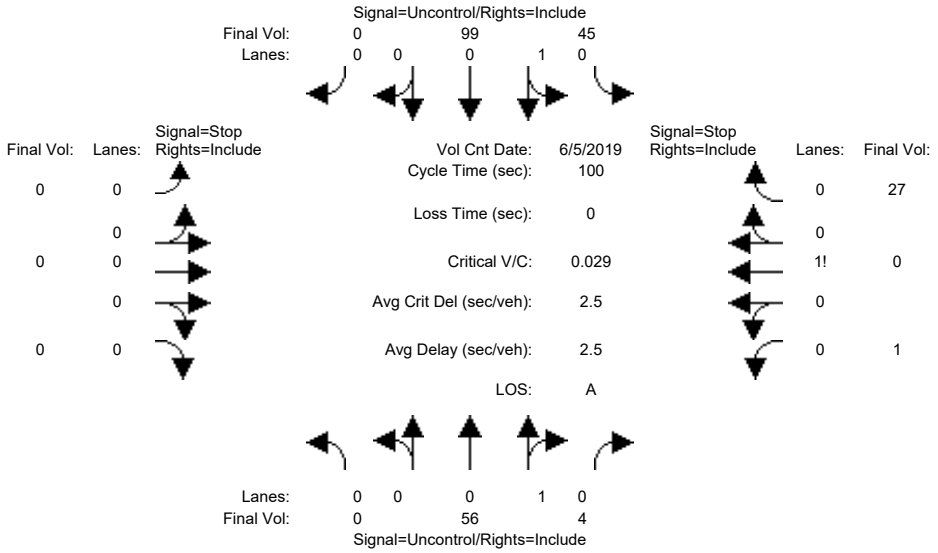
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_PM

Intersection #4: Pierce Rd & Saratoga Hieghts Dr




```
Street Name:            Pierce Rd                    Saratoga Hieghts Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0   17     2    31   60     0     0    0     0     1    0    18
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:    0   20     2    37   71     0     0    0     0     1    0    21
Added Vol:      0   13     0     0    9     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0   33     2    37   80     0     0    0     0     1    0    21
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.59 0.59  0.59  0.81 0.81  0.81  1.00 1.00  1.00  0.79 0.79  0.79
PHF Volume:     0   56     4    45   99     0     0    0     0     1    0    27
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0   56     4    45   99     0     0    0     0     1    0    27
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    61 xxxx xxxxx  xxxx xxxx xxxxx   248  248    59
Potent Cap.: xxxx xxxx xxxxx  1555 xxxx xxxxx  xxxx xxxx xxxxx   745  658  1012
Move Cap.:   xxxx xxxx xxxxx  1554 xxxx xxxxx  xxxx xxxx xxxxx   727  638  1011
Volume/Cap:  xxxx xxxx  xxxx  0.03 xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.03
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx   2.2 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     A    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  991 xxxxx
SharedQueue:xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.1 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx   7.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx  8.7 xxxxx
Shared LOS:     *    *     *     A    *     *     *    *     *     *    A     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.7
ApproachLOS:         *                *                *                A
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   33     2    37   80     0     0    0     0     1    0    21
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              8.7
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=22]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=174]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #4 Pierce Rd & Saratoga Hieghts Dr
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  0  1  0    0  1  0  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0   33     2    37   80     0     0    0     0     1    0    21
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             152
Minor Approach Volume:           22
Minor Approach Volume Threshold: 722
-------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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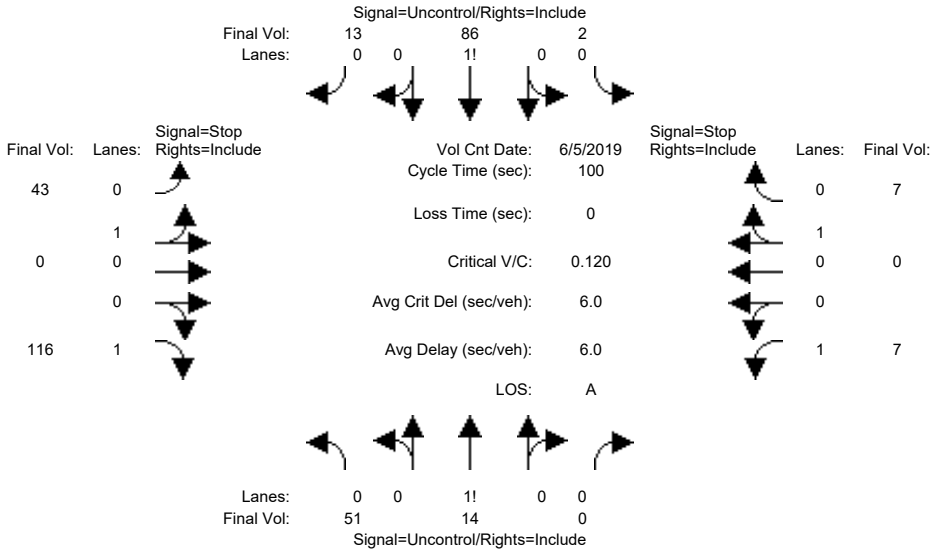
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_PM

Intersection #5: Pierce Rd & Winery Access/Vintage Ln




```
Street Name:            Pierce Rd                  Winery Access/Vintage Ln
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    8     0     1   57     1     7    0    11     2    0     2
Growth Adj:  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18  1.18 1.18  1.18
Initial Bse:    0    9     0     1   67     1     8    0    13     2    0     2
Added Vol:     34    0     0     0    0     9    13    0    45     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   34    9     0     1   67    10    21    0    58     2    0     2
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.67 0.67  0.67  0.78 0.78  0.78  0.50 0.50  0.50  0.33 0.33  0.33
PHF Volume:    51   14     0     2   86    13    43    0   116     7    0     7
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   51   14     0     2   86    13    43    0   116     7    0     7
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx   4.1 xxxx xxxxx   7.1  6.5   6.2   7.1  6.5   6.2
FollowUpTim:  2.2 xxxx xxxxx   2.2 xxxx xxxxx   3.5  4.0   3.3   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   99 xxxx xxxxx    14 xxxx xxxxx   215  212    93   270  218    14
Potent Cap.: 1506 xxxx xxxxx  1617 xxxx xxxxx   746  689   970   687  684  1072
Move Cap.:   1506 xxxx xxxxx  1617 xxxx xxxxx   721  665   970   588  659  1072
Volume/Cap:  0.03 xxxx  xxxx  0.00 xxxx  xxxx  0.06 0.00  0.12  0.01 0.00  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    2.6 xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx  10.2   0.9 xxxx xxxxx
Control Del:  7.5 xxxx xxxxx   7.2 xxxx xxxxx xxxxx xxxx   9.2  11.2 xxxx xxxxx
LOS by Move:    A    *     *     A    *     *     *    *     A     B    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   721 xxxx xxxxx  xxxx xxxx  1072
SharedQueue:  0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.2 xxxx xxxxx xxxxx xxxx   0.0
Shrd ConDel:  7.5 xxxx xxxxx xxxxx xxxx xxxxx  10.3 xxxx xxxxx xxxxx xxxx   8.4
Shared LOS:     A    *     *     *    *     *     B    *     *     *    *     A
ApproachDel:    xxxxxx           xxxxxx              9.5              9.8
ApproachLOS:         *                *                A                A
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   34    9     0     1   67    10    21    0    58     2    0     2
ApproachDel:    xxxxxx           xxxxxx              9.5              9.8
------------|---------------||---------------||---------------||---------------|
Approach[eastbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=79]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=206]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=5]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=206]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Pierce Rd & Winery Access/Vintage Ln
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  1  0  0  0    0  0  1! 0  0    0  1  0  0  1    1  0  0  1  0
Initial Vol:   34    9     0     1   67    10    21    0    58     2    0     2
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             122
Minor Approach Volume:           79
Minor Approach Volume Threshold: 954
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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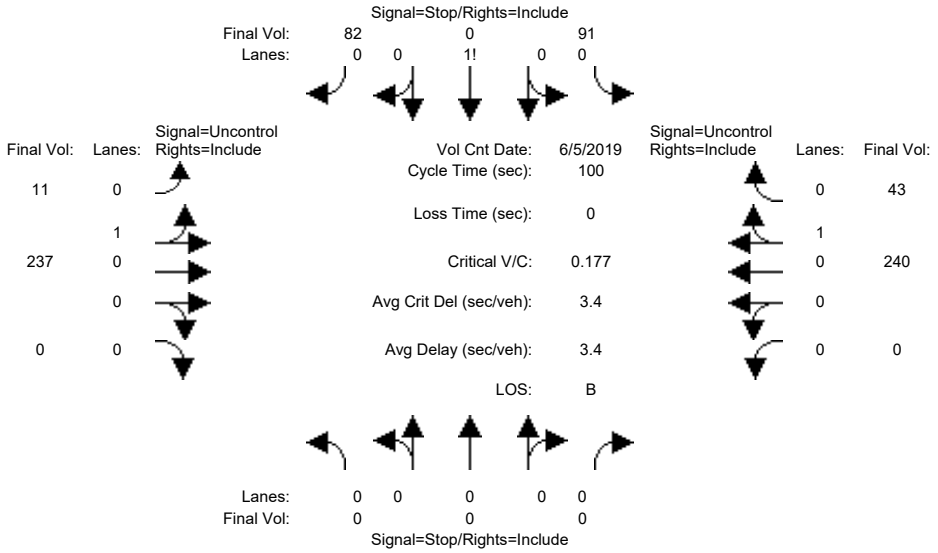
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_PM

Intersection #6: Pierce Rd & Route 9 (Congress Rd)




```
Street Name:            Pierce Rd                    Route 9 (Congress Rd)
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    12    0    45     6  127     0     0  136     4
Growth Adj:  1.00 1.00  1.00  1.18 1.18  1.18  1.68 1.68  1.68  1.68 1.68  1.68
Initial Bse:    0    0     0    14    0    53    10  213     0     0  228     7
Added Vol:      0    0     0    45    0     0     0    0     0     0    0    34
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    59    0    53    10  213     0     0  228    41
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.65 0.65  0.65  0.90 0.90  0.90  0.95 0.95  0.95
PHF Volume:     0    0     0    91    0    82    11  237     0     0  240    43
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    91    0    82    11  237     0     0  240    43
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   521  521   265   283 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   519  463   779  1285 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   516  459   777  1285 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.18 0.00  0.11  0.01 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.7 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.8 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  613 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  1.2 xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 13.2 xxxxx   7.8 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             13.2           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    59    0    53    10  213     0     0  228    41
ApproachDel:    xxxxxx             13.2           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.4]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=112]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=605]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
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signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #6 Pierce Rd & Route 9 (Congress Rd)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    59    0    53    10  213     0     0  228    41
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             493
Minor Approach Volume:           112
Minor Approach Volume Threshold: 408
--------------------------------------------------------------------------------
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```


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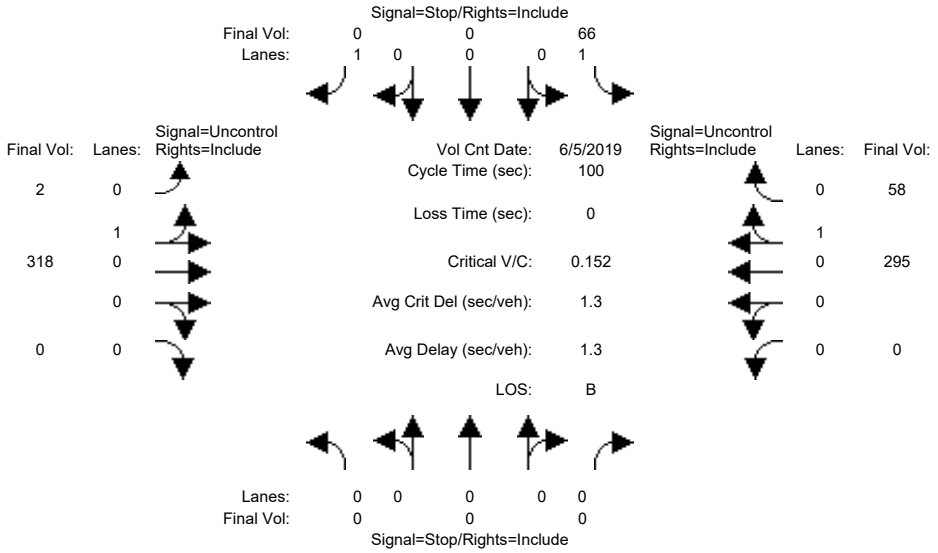
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CU+P_PM

Intersection #7: Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)




```
Street Name:           Toll Gate Rd           Route 9 (Congress Rd/Big Basin Wa
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 5 Jun 2019 <<
Base Vol:       0    0     0    45    0     0     1  140     0     0  138    31
Growth Adj:  1.00 1.00  1.00  1.18 1.18  1.18  1.68 1.68  1.68  1.68 1.68  1.68
Initial Bse:    0    0     0    53    0     0     2  235     0     0  232    52
Added Vol:      0    0     0     0    0     0     0   45     0     0   34     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    53    0     0     2  280     0     0  266    52
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  0.80 0.80  0.80  0.88 0.88  0.88  0.90 0.90  0.90
PHF Volume:     0    0     0    66    0     0     2  318     0     0  295    58
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    66    0     0     2  318     0     0  295    58
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4 xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   646 xxxx   326   353 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   439 xxxx   720  1211 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   439 xxxx   718  1211 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.15 xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  13.3 xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx  14.7 xxxx xxxxx   8.0 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     B    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.0 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx             14.7           xxxxxx           xxxxxx
ApproachLOS:         *                B                *                *
Note: Queue reported is the distance per lane in feet.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
*******************************************************************************
```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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    53    0     0     2  280     0     0  266    52
ApproachDel:    xxxxxx             14.7           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=53]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=653]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
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jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #7 Toll Gate Rd & Route 9 (Congress Rd/Big Basin Way)
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    1  0  0  0  1    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    53    0     0     2  280     0     0  266    52
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             600
Minor Approach Volume:           53
Minor Approach Volume Threshold: 453
--------------------------------------------------------------------------------
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```


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